DOCUMENT RESUME

ED 458 204 SP 040 336

AUTHOR Parsad, Basmat; Lewis, Laurie; Farris, Elizabeth

TITLE Teacher Preparation and Professional Development: 2000. E.D. Tabs.

INSTITUTION National Center for Education Statistics (ED), Washington, DC.
REPORT NO NCES-2001-088
PUB DATE 2001-08-00
NOTE 78p.; Project officer: Bernard Greene.
AVAILABLE FROM ED Pubs, P.O. Box 1398, Jessup, MD 20794-1398. Tel: 877-433-7827 (Toll Free); Web site: http://www.nces.ed.gov.
PUB TYPE Numerical/Quantitative Data (110) -- Reports - Research (143) -- Tests/Questionnaires (160)
EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Educational Quality; Elementary Secondary Education; *Faculty Development; Higher Education; Inservice Teacher Education; Preservice Teacher Education; Tables (Data); Teacher Attitudes; *Teacher Collaboration; *Teacher Competencies; *Teacher Improvement

ABSTRACT

In 2000, researchers conducted surveys on teacher preparation and qualifications, measuring change since 1998. Respondents were 5,253 K-12 teachers nationwide. The survey repeated some indicators of teacher quality examined in 1998 and explored new issues. Virtually all teachers held bachelor's degrees, and nearly half held master's degrees. Teachers were more likely to have participated in professional development emphasizing state or district curriculum and performance standards. For all but one content area of professional development, teachers reported having spent 1-8 hours on the activity during the preceding 12 months. Number of hours spent in professional development related to extent to which teachers believed that participation improved their teaching. Collaboration with other teachers was the most frequent collaborative activity. Over 60 percent of teachers felt very well prepared to meet the overall demands of teaching. They most often reported feeling very well prepared to maintain order and discipline in the classroom. The proportion of teachers participating in professional development was lower in 2000 than 1998 for three of seven content areas. For most classroom activities, teachers in 2000 were more likely than teachers in 1998 to report feeling very well prepared. Appended are research methodology, technical notes, and the survey instrument. (SM)

Reproductions supplied by EDRS are the best that can be made from the original document.

ED 458 204

NATIONAL CENTER FOR EDUCATION STATISTICS

E.D. Tabs August 2001

Teacher Preparation and Professional Development: 2000

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- ☐ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

SP0 40336

FRSS Fast Response Survey System

U.S. Department of Education
Office of Educational Research and Improvement NCES 2001-088

BEST COPY AVAILABLE

Customer Survey of OERI Publication Users

To help us improve future editions of this publication and give you better customer service, we would appreciate your comments on this survey form. Please check the appropriate box(es) below for each question. Responses will be kept completely confidential. You may return the survey by mail or FAX. It can be folded and taped closed to allow mailing to the address listed on the reverse side of this form, or it can be returned by FAX to 202–219–1321. **Many thanks for your customer feedback—it is very important to us!**

1a. Name of publication Teacher Preparation and ...

1b. Publication number NCES 2001-088

1c. Author name Bernard Greene

2. How did you receive a copy of this publication?

- ❑ Bought it
- ❑ Borrowed it
- ❑ Mailing list membership
- ❑ Telephone request
- ❑ Internet request
- ❑ Other (please describe)

3. Was this publication easy to get?

❑ Very ❑ Somewhat ❑ Not at all

4. How did you find out about this and other OERI publications? (Check all that apply.)

- ❑ Conferences
- ❑ Journal articles
- ❑ Teacher/educator
- ❑ Professional associations
- ❑ Internet (WWW)
- ❑ Publication announcement
- ❑ Received in mail
- ❑ OERI staff contact

5. For what purposes did you use this OERI publication? (Check all that apply.)

- ❑ Planning
- ❑ Policy or legislation
- ❑ Administrative decisions
- ❑ Teaching, class material
- ❑ Research/analysis
- ❑ General information
- ❑ Writing news articles, TV or radio material
- ❑ Marketing, sales, or promotion
- ❑ Other (please describe)

6. Did the publication help you accomplish whatever you needed it for?

❑ Yes ❑ No ❑ Partially

7. What is your occupation?

❑ Parent ❑ Teacher ❑ Administrator
❑ Librarian ❑ Researcher ❑ Statistician
❑ Journalist/writer ❑ Policy Analyst ❑ Student
❑ Program Planner
❑ Other (please specify)

8. How could this OERI publication (or other OERI publications) better meet your needs? (Check all that apply.)

- ❑ More important topics in education
- ❑ More timely release of data
- ❑ More text introductions to each section
- ❑ More research statistics
- ❑ Shorter reports (less than 10 pages)
- ❑ Other (please describe)

9. Overall, how satisfied are you with this product?	**Very Satisfied**	**Satisfied**	**Dissatisfied**
a. Comprehensiveness of information	❑	❑	❑
b. Clarity of writing (readability, interpretability)	❑	❑	❑
c. Clarity of presentation (e.g., tables, charts)	❑	❑	❑
d. Timeliness of information	❑	❑	❑
e. Accuracy of information	❑	❑	❑
f. Clarity of technical notes	❑	❑	❑
g. Usefulness of resources and bibliography	❑	❑	❑
h. Organization	❑	❑	❑
i. Length	❑	❑	❑
j. Format	❑	❑	❑

PAPERWORK BURDEN STATEMENT
Office of Education Research and Improvement (OERI)
Publication Customer Survey

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid CMB control number for this information collection is 1800-0011. The time required to complete this information collection is estimated to average 10 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s), suggestions for improving this form, or concerns regarding the status of your individual submission of this form, write directly to: **P. Quinn, Room 204, Media and Information Services, OERI, U.S. Department of Education, 555 New Jersey Avenue NW, Washington, DC 20208-5570.**

OERI Publication Customer Survey
Media and Information Services
U.S. Department of Education
Washington, DC 20202

Official Business
Penalty for Private Use, $300

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 012935 WASHINGTON DC

POSTAGE WILL BE PAID BY U.S. DEPARTMENT OF EDUCATION

U.S. Department of Education
Mail Code: 5570
400 Maryland Avenue, S.W.
Washington, D.C. 20277—2935

Fold on line—TAPE CLOSED—DO NOT STAPLE

10. Do you have any suggestions regarding the content or format of future editions of this publication or other comments?

MIS 1999-6532

NATIONAL CENTER FOR EDUCATION STATISTICS

E.D. Tabs August 2001

Teacher Preparation and Professional Development: 2000

FRSS
Fast Response Survey System

Basmat Parsad
Laurie Lewis
Elizabeth Farris
Westat, Inc.

Bernard Greene
Project Officer
National Center for Education Statistics

U.S. Department of Education
Office of Educational Research and Improvement NCES 2001–088

U.S. Department of Education
Rod Paige
Secretary

Office of Educational Research and Improvement
Grover J. Whitehurst
Assistant Secretary

National Center for Education Statistics
Gary W. Phillips
Acting Commissioner

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high quality data to the U.S. Department of Education, the Congress, the states, other education policymakers, practitioners, data users, and the general public.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to:

National Center for Education Statistics
Office of Educational Research and Improvement
U.S. Department of Education
1990 K Street, NW
Washington, DC 20006–5561

August 2001

The NCES World Wide Web Home Page is: ***http://nces.ed.gov***
The NCES World Wide Web Electronic Catalog is: ***http://nces.ed.gov/pubsearch/index.asp***

Suggested Citation

U.S. Department of Education, National Center for Education Statistics. *Teacher Preparation and Professional Development: 2000*, NCES 2001–088, by Basmat Parsad, Laurie Lewis, and Elizabeth Farris. Project Officer: Bernard Greene. Washington, DC: 2001.

For ordering information on this report, write:

U.S. Department of Education
ED Pubs
P.O. Box 1398
Jessup, MD 20794–1398

or call toll free 1–877–4ED–Pubs.

Content Contact:
Bernard Greene
(202) 502–7348

Executive Summary

Concerns about the quality of the nation's public education system have increased attention to key elements of teacher effectiveness within recent years (Darling-Hammond 2000; Lewis et al. 1999; Mayer, Mullens, and Moore 2001; National Commission on Teaching and America's Future 1996). While there is little consensus on what constitutes high-quality teachers, past research has emphasized two broad dimensions of teacher effectiveness: (1) the level of knowledge and skills that teachers bring to the classroom, as measured by teacher preparation and qualifications, and (2) classroom practices. In 1998, NCES conducted a survey through its Fast Response Survey System (FRSS) to provide a national profile on the first dimension of teacher quality—teacher preparation and qualifications (Lewis et al. 1999).

In 2000, NCES conducted a second FRSS survey to revisit the issue of teacher preparation and qualifications and measure change since 1998. The sample for the 2000 survey consisted of 5,253 full- and part-time teachers in regular elementary, middle, and high schools in the 50 states and the District of Columbia. The survey repeated some of the indicators of teacher quality examined in the 1998 survey, in addition to exploring issues such as follow up to professional development. Specifically, this survey provides a national profile on (1) teacher education, (2) teacher participation in formal professional development and collaborative activities related to teaching, and (3) teachers' feelings of preparedness for various classroom demands. This report summarizes key findings from the 2000 survey and also makes comparisons with the 1998 data.

Key Findings

Teacher Education

One measure of teacher education is the type of degree held, including advanced degrees. Findings from the 2000 survey indicate that:

- Virtually all public school teachers had a bachelor's degree, and 45 percent held a master's degree (table 1). One percent held either a doctorate or some other degree, and 18 percent reported having other certificates.

- Newer teachers were less likely than more experienced teachers to report having a master's degree, ranging from 20 percent of teachers with 3 or fewer years of teaching experience to 54 percent of teachers with 10 or more years of teaching experience (table 1).

Teacher Professional Development

Formal professional development and collaboration with other teachers are key mechanisms for providing teachers with ongoing training opportunities (Henke, Chen, and Geis 2000; National Commission on Teaching and America's Future 1996; Sprinthall, Reiman, and Theis-Sprinthall 1996).

Formal professional development as commonly practiced, typically consisting of school and district staff development programs, however, has been criticized for being short term and lacking in continuity and adequate follow up (Fullan with Stiegelbauer 1991; Lewis et al. 1999; Mullens et al. 1996). Results of the 2000 survey indicate that during the 12 months preceding the survey:

- Public school teachers were most likely to have participated in professional development that focused on state or district curriculum and performance standards (80 percent; table 2). More than one-half participated in professional development programs focused on the integration of educational technology into the grade or subject taught (74 percent), in-depth study in the subject area of the main teaching assignment (72 percent), implementing new methods of teaching (72 percent), and student performance assessment (62 percent). Teachers were less likely to have participated in professional development that focused on addressing the needs of students with disabilities (49 percent), encouraging parent and community involvement (46 percent), classroom management, including student discipline (45 percent), and addressing the needs of students from diverse cultural backgrounds (41 percent). The professional development area in which teachers were least likely to participate was addressing the needs of students with limited English proficiency (26 percent). [1]

- For all but one content area of professional development, teachers typically reported that they had spent 1 to 8 hours or the equivalent of 1 day or less on the activity during the 12 months preceding the survey (table 2). In-depth study in the subject area of the main teaching assignment was the only area of professional development in which participation typically lasted more than 8 hours.

- The number of hours teachers spent in professional development activities was related to the extent to which they believed that participation improved their teaching (table 6). For every content area examined in the survey, teachers who participated for more than 8 hours were more likely than those who spent 1 to 8 hours to report that participation improved their teaching a lot.

Teacher Collaboration

Collaboration with other teachers may revolve around joint work (e.g., team teaching and mentoring) and teacher networks (e.g., school-to-school and school-university partnerships). The 2000 survey findings indicate that:

- The most frequently attended collaborative activity among public school teachers was collaboration with other teachers (69 percent; table 8). This activity was followed by networking with teachers outside their school (62 percent), a common planning period for team teachers (53 percent), and individual or collaborative research on a topic of professional interest (52 percent). Teachers were least likely to mentor another teacher in a formal relationship (26 percent) or to be mentored by another teacher (23 percent).

---

[1] The estimate for teacher participation in professional development on addressing the needs of students with limited English proficiency was based on all public teachers rather than teachers who taught students with those needs.

- Frequency of participation in a collaborative activity was generally positively related to teachers' beliefs about the extent to which the activity improved their classroom teaching (table 10). For example, teachers who engaged in regularly scheduled collaboration with other teachers at least once a week were more likely to believe that participation had improved their teaching a lot (45 percent), compared with teachers who participated two to three times a month (23 percent), once a month (15 percent), or a few times a year (7 percent).

Teachers' Feelings of Preparedness

Teachers in the 2000 survey reported the extent to which they felt prepared for the overall demands of their teaching assignments and for eight specific classroom activities. The survey data indicate that:

- Sixty-one percent of public school teachers felt very well prepared to meet the overall demands of their teaching assignments (table 11). Thirty-five percent felt moderately well prepared, and 4 percent felt somewhat well prepared.

- Teachers most often reported feeling very well prepared to maintain order and discipline in the classroom (71 percent; table 11). They were less likely to report feeling very well prepared to implement new methods of teaching (45 percent), implement state or district curriculum (44 percent), use student performance assessment (37 percent), address the needs of students from diverse cultural backgrounds (32 percent), and integrate educational technology into the grade or subject taught (27 percent).

- Among teachers who taught students with special needs, relatively few felt very well prepared to address those students' needs (table 11). Twenty-seven percent of teachers indicated that they felt very well prepared to address the needs of students with limited English proficiency, and 32 percent of the teachers who taught students with disabilities felt very well prepared to address those students' needs.

- The extent to which teachers felt very well prepared for most classroom activities varied with the amount of time spent in recent professional development in those activities (table 13). With two exceptions (classroom management and state or district curriculum and performance standards), teachers who spent over 8 hours in professional development on the activity were more likely than those who spent 1 to 8 hours or those who did not participate at all to indicate that they felt very well prepared for that activity.

- For three collaborative activities related to teaching—regularly scheduled collaboration with other teachers, networking with teachers outside the school, and mentoring another teacher in a formal relationship—teachers who participated in the activity were more likely than those who did not participate to report feeling very well prepared for the overall demands of their classroom assignments (table 15).

Selected Comparisons With the 1998 Survey

The 2000 survey was designed to provide trend data that would allow an examination of change since 1998 along two key dimensions—teacher participation in professional development and collaborative activities, and teachers' feelings of preparedness. For these analyses, a subset of teachers was selected from the 2000 survey that was similar to the teachers sampled for the 1998 survey—that is, regular full-time public school teachers in grades 1 through 12 whose main teaching assignment was in English, mathematics, social studies, foreign languages, or science, or who taught in a self-contained classroom. Findings from the 1998 and 2000 surveys indicate that:

- The proportion of regular full-time teachers indicating that they participated in professional development was lower in 2000 than in 1998 for three of the seven content areas that were comparable across years—new methods of teaching (73 versus 77 percent), student performance assessment (62 versus 67 percent), and classroom management, including student discipline (43 versus 49 percent; table 16).

- In 1998 and 2000, participation of regular full-time public school teachers in professional development was likely to be short term, typically lasting for 1 to 8 hours (table 16). This pattern held for every content area of professional development examined in the surveys except for programs on in-depth study in the subject area of the main teaching assignment, where participation typically lasted more than 8 hours.

- In 1998 and 2000, regular full-time public school teachers most often reported that they felt very well prepared to maintain order and discipline in the classroom (71 and 72 percent, respectively; table 18). In both years, teachers were least likely to report feeling very well prepared to integrate educational technology into the grade or subject taught (20 and 27 percent, respectively) and address the needs of students with disabilities (21 and 29 percent, respectively).

- For all but one classroom activity examined in the surveys, regular full-time public school teachers in 2000 were more likely than those in 1998 to report that they felt very well prepared (table 18). The exception was maintaining order and discipline in the classroom.

Table of Contents

	Page
Executive Summary	iii
Introduction	1
Selected Findings	3
Teacher Education	3
Teacher Professional Development and Collaboration	4
Participation in Formal Professional Development	4
Continuity and Relevance of Professional Development	5
Perceived Impact of Professional Development	6
Teacher Collaboration	7
Teachers' Feelings of Preparedness	8
Selected Comparisons With the 1998 Survey	10
Teacher Professional Development and Collaboration	10
Teachers' Feelings of Preparedness	11
References	12

List of Appendices

Appendix

A	Methodology and Technical Notes	A-1
B	Survey Instrument	B-1

Table of Contents (continued)

List of Tables

Table		Page
1.	Percent of public school teachers who hold bachelor's, master's, doctorates, other degrees, and/or other certificates, by selected teacher and school characteristics: 2000	13
1a.	Standard errors of the percent of public school teachers who hold bachelor's, master's, doctorates, other degrees, and/or other certificates, by selected teacher and school characteristics: 2000	14
2.	Percent of public school teachers who participated in professional development activities during the last 12 months that focused on various content areas, by the number of hours spent on the activity: 2000	15
2a.	Standard errors of the percent of public school teachers who participated in professional development activities during the last 12 months that focused on various content areas, by the number of hours spent on the activity: 2000	16
3.	Percent of public school teachers who participated in professional development activities during the last 12 months, by content area and selected teacher and school characteristics: 2000	17
3a.	Standard errors of the percent of public school teachers who participated in professional development activities during the last 12 months, by content area and selected teacher and school characteristics: 2000	18
4.	Percent of public school teachers indicating the extent to which their participation in professional development during the last 12 months has been linked to or followed by various school-based activities related to the teachers' professional development experience: 2000	19
4a.	Standard errors of the percent of public school teachers indicating the extent to which their participation in professional development during the last 12 months has been linked to or followed by various school-based activities related to the teachers' professional development experience: 2000	20
5.	Percent of public school teachers indicating the extent to which participation in professional development activities in various content areas during the last 12 months improved their teaching: 2000	21
5a.	Standard errors of the percent of public school teachers indicating the extent to which participation in professional development activities in various content areas during the last 12 months improved their teaching: 2000	22

Table of Contents (continued)

List of Tables

Table		Page
6.	Percent of public school teachers indicating the extent to which participation in professional development activities in various content areas during the last 12 months improved their teaching, by the number of hours spent in professional development in the content area: 2000	23
6a.	Standard errors of the percent of public school teachers indicating the extent to which participation in professional development activities in various content areas during the last 12 months improved their teaching, by the number of hours spent in professional development in the content area: 2000	24
7.	Percent of public school teachers indicating that participation in professional development activities in various content areas during the last 12 months improved their teaching a lot or moderately, by the extent to which professional development has been linked to various school-based activities: 2000	25
7a.	Standard errors of the percent of public school teachers indicating that participation in professional development activities in various content areas during the last 12 months improved their teaching a lot or moderately, by the extent to which professional development has been linked to various school-based activities: 2000	26
8.	Percent of public school teachers who participated in various activities related to teaching during the last 12 months, by frequency of participation: 2000	27
8a.	Standard errors of the percent of public school teachers who participated in various activities related to teaching during the last 12 months, by frequency of participation: 2000	28
9.	Percent of public school teachers indicating the extent to which participation in various teaching-related activities during the last 12 months improved their teaching: 2000	29
9a.	Standard errors of the percent of public school teachers indicating the extent to which participation in various teaching-related activities during the last 12 months improved their teaching: 2000	30
10.	Percent of public school teachers indicating the extent to which participation in various teaching-related activities improved their teaching, by the frequency with which they participated in that activity during the last 12 months: 2000	31

Table of Contents (continued)

List of Tables

Table		Page
10a.	Standard errors of the percent of public school teachers indicating the extent to which participation in various teaching-related activities improved their teaching, by the frequency with which they participated in that activity during the last 12 months: 2000	32
11.	Percent of public school teachers indicating how well prepared they felt for various activities in the classroom: 2000	33
11a.	Standard errors of the percent of public school teachers indicating how well prepared they felt for various activities in the classroom: 2000	34
12.	Percent of public school teachers indicating they felt very well prepared for various activities in the classroom, by selected teacher and school characteristics: 2000	35
12a.	Standard errors of the percent of public school teachers indicating they felt very well prepared for various activities in the classroom, by selected teacher and school characteristics: 2000	36
13.	Percent of public school teachers indicating how well prepared they felt for various activities in the classroom, by the number of hours spent in professional development in the content area of the activity during the last 12 months: 2000	37
13a.	Standard errors of the percent of public school teachers indicating how well prepared they felt for various activities in the classroom, by the number of hours spent in professional development in the content area of the activity during the last 12 months: 2000	38
14.	Percent of public school teachers indicating how well prepared they felt to meet the overall demands of their teaching assignments, by the extent to which their participation in professional development has been linked to various school-based activities: 2000	39
14a.	Standard errors of the percent of public school teachers indicating how well prepared they felt to meet the overall demands of their teaching assignments, by the extent to which their participation in professional development has been linked to various school-based activities: 2000	40
15.	Percent of public school teachers indicating how well prepared they felt for meeting the overall demands of their teaching assignments, by whether they participated in various teaching-related activities during the last 12 months: 2000	41

Table of Contents (continued)

List of Tables

Table		Page
15a.	Standard errors of the percent of public school teachers indicating how well prepared they felt for meeting the overall demands of their teaching assignments, by whether they participated in various teaching-related activities during the last 12 months: 2000	42
16.	Percent of full-time public school teachers indicating that they participated in professional development activities during the last 12 months that focused on various content areas, by the number of hours spent in the activity: 1998 and 2000	43
16a.	Standard errors of the percent of full-time public school teachers indicating that they participated in professional development activities during the last 12 months that focused on various content areas, by the number of hours spent in the activity: 1998 and 2000	44
17.	Percent of full-time public school teachers who participated in various teaching-related activities during the last 12 months, by frequency of participation: 1998 and 2000	45
17a.	Standard errors of the percent of full-time public school teachers who participated in various teaching-related activities during the last 12 months, by frequency of participation: 1998 and 2000	46
18.	Percent of full-time public school teachers indicating how well prepared they felt for various activities in the classroom: 1998 and 2000	47
18a.	Standard errors of the percent of full-time public school teachers indicating how well prepared they felt for various activities in the classroom: 1998 and 2000	48

Introduction

Concerns about the quality of the nation's public education system have drawn attention to key elements of teacher effectiveness (Darling-Hammond 2000; Lewis et al. 1999; Mayer, Mullens, and Moore 2001; National Commission on Teaching and America's Future 1996). While there is little consensus on what constitutes high-quality teachers, past research has emphasized two broad dimensions of teacher effectiveness: (1) the level of knowledge and skills that teachers bring to the classroom, as measured by teacher preparation and qualifications, and (2) classroom practices. In 1998, the National Center for Education Statistics (NCES) conducted a survey to provide a national profile on the first dimension of teacher quality—teacher preparation and qualifications (Lewis et al. 1999).

In 2000, NCES conducted a second survey on Teacher Professional Development and Training to revisit the issue of teacher preparation and qualifications and measure change since 1998. The 2000 survey repeated key indicators of teacher quality examined in the 1998 survey, in addition to exploring issues such as follow up to professional development. This survey was designed to provide a national profile of all public school teachers, unlike the 1998 survey, which collected data on regular, full-time public school teachers whose main assignment was in a core academic field (English/language arts, mathematics, foreign languages, social studies, and science) or who taught a self-contained class (typically elementary level).[2] Specifically, the 2000 survey examines the following indicators of teacher quality:

- Teacher education;
- Teacher participation in formal professional development and collaborative activities related to teaching; and
- Teachers' feelings of preparedness for various classroom demands.

In addition to presenting current findings on teacher professional development and training from the 2000 survey, this report makes comparisons with the 1998 data.

The 2000 survey was conducted by NCES using the Fast Response Survey System (FRSS). The FRSS is a survey system designed to collect small amounts of issue-oriented data with minimal burden on the respondents and disseminate findings within a relatively short time period. Questionnaires were mailed to a nationally representative sample of 5,253 public school teachers in the 50 states and the District of Columbia. Data have been weighted to yield national estimates. Detailed information about the survey methodology is provided in appendix A, and the questionnaire can be found in appendix B.

In addition to national estimates, selected survey findings are presented by the following teacher and school characteristics:

---

[2] The 2000 sample universe was expanded to all public school teachers to correct for the sample limitations of the 1998 study. The findings of the 1998 study could be generalized only to regular full-time public school teachers in grades 1 through 12 whose main teaching assignment was in English, mathematics, social studies, foreign languages, or science, or who taught in a self-contained setting. See appendix A, survey methodology and technical notes, for more details.

- Teachers' years of teaching experience (3 or fewer years, 4 to 9 years, 10 or more years);
- School instructional level[3] (elementary, middle, secondary, combined);
- School enrollment size (less than 500, 500 to 999, 1,000 or more);
- School locale (central city, urban fringe/large town, rural/small town);
- Percent minority enrollment in the school (5 percent or less, 6 to 20 percent, 21 to 50 percent, more than 50 percent); and
- Percent of students eligible for free or reduced-price lunch (less than 35 percent, 35 to 49 percent, 50 to 74 percent, 75 percent or more).

All specific statements of comparisons made in this report have been tested for statistical significance through chi-square tests and *t*-tests adjusted for multiple comparisons using the Bonferroni adjustment and are significant at the 95 percent confidence level or better. However, not all significant comparisons have been presented in the report.

[3] Definitions of instructional levels (elementary, middle, secondary, and combined) may differ from other NCES publications. See appendix A for a description of the variable.

Selected Findings

This E.D. Tabs report presents key findings from the 2000 survey on teacher professional development and training.[4] To provide a national profile of teacher quality in public schools, selected findings on important indicators of teacher preparation and qualifications are organized into three sections: (1) teacher education; (2) teacher participation in formal professional development and activities related to teaching; and (3) teachers' feelings of preparedness for the classroom. A fourth section focuses on selected comparisons between the 1998 and 2000 survey data.

Teacher Education

One measure of teacher education is the type of degree held, including advanced degrees. Findings from the 2000 survey indicate that:

- Virtually all public school teachers had a bachelor's degree, and 45 percent held a master's degree (table 1). One percent held either a doctorate or some other degree, and 18 percent reported having other certificates.

- Newer teachers were less likely than more experienced teachers to report having a master's degree, ranging from 20 percent of teachers with 3 or fewer years of teaching experience to 54 percent of teachers with 10 or more years of teaching experience (table 1).

- The proportion of teachers with a master's degree differed by school enrollment size and locale. Teachers in small schools were less likely than those in large schools to hold a master's degree (40 versus 49 percent; table 1).[5] Teachers in rural/small town schools were less likely than those in schools located in central cities and urban fringes/large towns to report having a master's degree (39 percent versus 46 and 47 percent, respectively).

- The proportion of teachers with a master's degree was 42 percent for schools with the highest poverty concentration (75 percent or more of students were eligible for free or reduced-price lunch) and 48 percent in schools with the lowest poverty concentration (less than 35 percent of the students were eligible for free or reduced-price lunch; table 1). These differences are not statistically significant because of large standard errors surrounding estimates of teachers with master's degrees broken out by categories of poverty concentration.

---

[4] E.D. Tabs are typically a collection of tabular summaries whose sole purpose is to make relevant data available to the public within a relatively short time period. The structure of the report includes highlights of selected findings and tables.

[5] Small schools are defined as having enrollments of less than 500, medium-sized schools have enrollments of 500 to 999, and large schools have 1,000 or more students.

Teacher Professional Development and Collaboration

Formal professional development and collaboration with other teachers are key mechanisms for providing teachers with ongoing training opportunities (Henke, Chen, and Geis 2000; National Commission on Teaching and America's Future 1996; Sprinthall, Reiman, and Theis-Sprinthall 1996). Formal professional development, typically consisting of school and district staff development programs, however, has been criticized for being short term and lacking in continuity and adequate follow up (Fullan with Stiegelbauer 1991). This criticism was partially supported by past data indicating that formal professional development typically lasts for the equivalent of 1 day (Lewis et al. 1999; Mullens et al. 1996).

The 2000 survey on teacher professional development and training asked about teacher participation in formal professional development, the duration of professional development training, and the perceived impact of professional development on teaching. In addition, the survey asked about the extent to which formal professional development in which teachers participated was linked to or followed up by various school-based programs and activities.

Participation in Formal Professional Development

Public school teachers surveyed in 2000 were asked about their participation in professional development that focused on 10 content areas: state or district curriculum and performance standards, integration of educational technology in the grade or subject taught, in-depth study in the subject area of the main teaching assignment, new methods of teaching, student performance assessment, encouraging parent and community involvement, classroom management, and addressing various needs of special student populations (i.e., students with disabilities, those from diverse cultural backgrounds, and those with limited English proficiency). Findings from the 2000 survey indicate that:

- Public school teachers were most likely to have participated in professional development that focused on state or district curriculum and performance standards (80 percent; table 2). This was followed by professional development on integration of educational technology into the grade or subject taught (74 percent), in-depth study in the subject area of the main teaching assignment (72 percent), implementing new methods of teaching (72 percent), and student performance assessment (62 percent).

- Teachers were less likely to have participated in professional development that focused on addressing the needs of students with disabilities (49 percent), encouraging parent and community involvement (46 percent), classroom management, including student discipline (45 percent), and addressing the needs of students from diverse cultural backgrounds (41 percent; table 2). The professional development area in which teachers were least likely to participate was addressing the needs of students with limited English proficiency (26 percent).[6]

- For all but one content area of professional development, teachers typically reported that they had spent 1 to 8 hours or the equivalent of 1 day or less on the activity during the 12

[6] The estimate for teacher participation in professional development on addressing the needs of students with limited English proficiency was based on all public teachers rather than teachers who taught students with those needs.

months preceding the survey (table 2). Moreover, teachers were least likely to spend more than 32 hours on professional development for each content area examined. For example, of the teachers who participated in professional development on the integration of educational technology in the grade or subject taught, 61 percent spent 1 to 8 hours, 28 percent spent 9 to 32 hours, and 11 percent spent more than 32 hours on professional development in that content area. In-depth study in the subject area of the main teaching assignment was the only area of professional development in which participation typically lasted more than 8 hours.

- More experienced teachers were less likely than newer teachers to have participated in professional development on classroom management, ranging from 39 percent of teachers with 10 or more years of teaching experience to 63 percent of teachers with 3 or fewer years of teaching experience (table 3). Moreover, very experienced teachers (with 10 or more years of teaching experience) were less likely than less experienced teachers to participate in professional development that focused on in-depth study in the main teaching assignment and new methods of teaching. Teaching experience did not make a difference to teachers' participation in any of the other professional development activities examined in the survey.

- Public school teachers in schools with the highest poverty concentration were more likely than those who taught in schools with the lowest poverty concentration to report that they participated in professional development programs on 4 of the 10 content areas examined in the survey—in-depth study in the subject area of the main teaching assignment, classroom management, addressing the needs of students from diverse cultural backgrounds, and addressing the needs of students with limited English proficiency (table 3).

- Public school teachers in schools with the highest concentration of minority students were more likely than teachers who taught in schools with the lowest concentration of minority students to report that they participated in professional development programs that were relevant to students who may have special needs—students from diverse cultural backgrounds and those with limited English proficiency (table 3).

Continuity and Relevance of Professional Development

A core argument against formal professional development as commonly practiced is that the programs are not likely to have lasting effects unless they are designed to provide continuity between what teachers learn and what goes on in the classroom (Fullan with Steigelbauer 1991). To address issues of linkages and continuity in professional development improvement activities, the survey asked about the extent to which professional development was linked to other program activities at the school, followed by school administration support in applying what the teacher had learned, followed by needed follow-up sessions or additional training, and followed by school activities in which the teacher helped other teachers put the new ideas to use. These analyses are restricted to public school teachers who participated in at least one professional development activity examined in the survey (99 percent).[7] The 2000 survey findings show that:

[7] It is important to note that it might not be reasonable to expect the school to follow up on teacher participation in professional development activities that are initiated by teachers themselves.

- Of the public school teachers who participated in any of the professional development activities examined in the survey, 18 percent indicated that their professional development was linked to other program improvement activities at their school to a great extent, 38 percent reported it was linked to a moderate extent, and 29 percent indicated it was linked to a small extent (table 4). Fifteen percent indicated that their professional development was not linked to other program activities at the school.

- The proportion of teachers reporting that their professional development was followed by related school-based activities to a great extent ranged from 10 percent for activities in which the teachers helped others to put new ideas to use to 15 percent for school administration support in applying what the teachers had learned (table 4).

- About one-fourth of teachers (24 percent) indicated that their professional development was not followed by school administration support in applying what they had learned. Thirty-two percent reported no follow-up sessions or additional training, and 35 percent indicated that their professional development was not followed by school activities in which they help other teachers put new ideas to use (table 4).

Perceived Impact of Professional Development

In the 2000 survey, public school teachers were asked to assess the extent to which participation in professional development programs in a specific content area improved their teaching. These data were analyzed to determine whether teachers' perceptions of the impact of professional development were related to (1) the amount of time spent in professional development activities, and (2) linkages and follow-up activities for professional development in which teachers had participated. Findings from the 2000 survey indicate that:

- The proportion of teachers who participated in professional development in a specific content area who believed it improved their teaching a lot ranged from 12 percent for programs on encouraging parent and community involvement to 27 percent for in-depth study in the subject area of their main teaching assignment (table 5). The proportion of teachers who felt that professional development did not improve their teaching at all ranged from 2 percent for programs on in-depth study in the subject area of the main teaching assignment to 11 percent for programs on encouraging parent and community involvement, and those on state or district curriculum and performance standards.

- The number of hours teachers spent in professional development activities was related to the extent to which they believed that participation improved their teaching (table 6). For every content area, teachers who participated for more than 8 hours were more likely than those who spent 1 to 8 hours to report that it improved their teaching a lot. For example, 33 percent of teachers who spent more than 8 hours in professional development on new methods of teaching reported that their participation in the program improved their teaching a lot, compared with 11 percent of the teachers who spent 1 to 8 hours on that activity.

- Teachers' assessment of the impact of professional development on teaching was related to the extent to which they felt that their professional development was linked to other program activities at the school (table 7). For every content area, teachers who reported that their

professional development was linked to other program activities at their school to a large or moderate extent were more likely than those who felt that it was linked to a small extent or not at all to report that participation improved their teaching a lot or moderately.

- For every professional development activity examined in the survey, the extent to which teachers felt that participation in the activity improved their teaching depended on whether that activity was followed by various school-based activities (table 7). For example, teachers who reported that their professional development was followed by needed follow-up sessions or additional training to a large or moderate extent were more likely than those who felt it was followed up to a small extent or not at all to report that participation in professional development on the integration of educational technology improved their teaching a lot or moderately (72 versus 54 percent).

Teacher Collaboration

Collaboration with other teachers may revolve around joint work (e.g., team teaching and mentoring) and teacher networks (e.g., school-to-school and school-university partnerships). These networks can be powerful learning mechanisms for teachers to share subject and pedagogical knowledge across classrooms and schools (Lieberman and Grolnick 1996; Little 1993). In 2000, teachers were asked about their participation in the following activities during the 12 months preceding the survey: regularly scheduled collaboration with other teachers, networking with teachers outside the school, common planning period for team teachers, individual or collaborative research on a topic of interest professionally, mentoring another teacher in a formal relationship, and being mentored by another teacher. Teachers were also asked about the frequency with which they participated in each activity, and the extent to which they believed that participation improved their teaching. The 2000 survey findings indicate that:

- The most frequently attended collaborative activity among public school teachers was regularly scheduled collaboration with other teachers (69 percent; table 8). This activity was followed by networking with teachers outside their school (62 percent), a common planning period for team teachers (53 percent), and individual or collaborative research on a topic of professional interest (52 percent). Teachers were least likely to mentor another teacher in a formal relationship (26 percent) or to be mentored by another teacher (23 percent).

- The activities that teachers were more likely to report participating in were not necessarily the activities that they participated in most regularly, that is, once a week (table 8). For example, while 62 percent of teachers participated in networking with teachers outside their school, 10 percent of them actually participated in the activity at least once a week. In contrast, while 26 percent of teachers participated in mentoring another teacher in a formal relationship, 44 percent of them did so at least once a week.

- The proportion of teachers who felt that participation in various teaching-related activities improved their teaching a lot ranged from 18 percent for mentoring another teacher in a formal relationship to 37 percent for being mentored by another teacher in a formal relationship (table 9). The proportion of teachers who felt that participation did not improve their teaching at all ranged from 2 percent for individual or collaborative research to 10 percent for mentoring another teacher in a formal relationship.

- Frequency of participation in a collaborative activity was generally positively related to teachers' beliefs about the extent to which the activity improved their classroom teaching (table 10). For example, teachers who engaged in regularly scheduled collaboration with other teachers at least once a week were more likely to believe that participation had improved their teaching a lot (45 percent), compared with teachers who participated two to three times a month (23 percent), once a month (15 percent), or a few times a year (7 percent).

Teachers' Feelings of Preparedness

To explore the extent to which teachers might be prepared for new and ongoing challenges in the classroom, the 2000 survey asked about how prepared teachers felt for the overall demands of their teaching assignments. Teachers were also asked about how prepared they felt for specific classroom activities: maintaining order and discipline in the classroom, implementing new methods of teaching, implementing state or district curriculum and performance standards, using student performance assessment, and integrating educational technology into the grade or subject taught. Moreover, teachers were asked about their preparedness to address the needs of special student populations (i.e., students from diverse cultural backgrounds, those with disabilities, and those with limited English proficiency).[8] The 2000 survey data indicate that:

- Sixty-one percent of public school teachers felt very well prepared to meet the overall demands of their teaching assignments (table 11). Thirty-five percent felt moderately well prepared, and 4 percent felt somewhat well prepared.

- The classroom activity for which teachers most often reported feeling very well prepared was maintaining order and discipline in the classroom; 71 percent indicated that they felt very well prepared for this activity (table 11). Teachers were less likely to report feeling very well prepared to implement new methods of teaching (45 percent) or implement state or district curriculum (44 percent). This was followed by the proportion of teachers who reported feeling very well prepared to use student performance assessment (37 percent), address the needs of students from diverse cultural backgrounds (32 percent), and integrate educational technology in the grade or subject taught.

- Among teachers who taught students with special needs (students with limited English proficiency and those with disabilities), relatively few felt very well prepared to address those students' needs (table 11). For example, 27 percent of teachers who taught students with limited English proficiency indicated that they felt very well prepared to address the needs of those students, 33 percent felt moderately well prepared, 28 percent felt somewhat well prepared, and 12 percent indicated that they were not prepared at all to address those students' needs.

- For all but one classroom activity examined in the survey, the proportion of teachers who reported feeling very well prepared differed by years of teaching experience (table 12). For example, newer teachers were less likely than more experienced teachers to report that they

[8] The analyses for teachers' feelings of preparedness to address the needs of students with disabilities and the needs of students with limited English proficiency, respectively, were based on subsets of teachers who taught students with those special needs at the school.

felt very well prepared to maintain order and discipline in the classroom, ranging from 51 percent of teachers with 3 or fewer years of teaching experience to 77 percent of teachers with 10 or more years of teaching experience. The exception was integrating educational technology into the grade or subject taught.

Teacher preparedness incorporates what the teacher brings to the classroom from preservice training and on-the-job learning. Therefore, the extent to which public school teachers felt prepared for the classroom was examined against (1) the amount of time spent on professional development activities, (2) the extent to which professional development in which teachers participated was linked to development programs and follow-up activities at the school, and (3) whether teachers participated in collaborative activities related to teaching. Results of the 2000 survey indicate that:

- The extent to which teachers felt very well prepared to meet most classroom demands varied with the amount of time spent in recent professional development in that activity (table 13). For example, teachers who spent over 8 hours in professional development on student performance assessment were more likely than those who spent 1 to 8 hours or those who did not participate at all to indicate that they felt very well prepared to meet the classroom requirement (46 percent versus 37 and 32 percent, respectively). This pattern held for all but two classroom requirements—classroom management and state or district curriculum and performance standards.

- Among teachers who did *not* participate in professional development on the integration of educational technology into the grade or subject taught, 22 percent indicated that they felt very well prepared and 17 percent said they did not feel prepared at all for this classroom activity (table 13). Similarly, among teachers who did not participate in any professional development on addressing the needs of students with limited English proficiency, 20 percent indicated that they felt very well prepared and 19 percent did not feel prepared at all for the activity.

- The likelihood of teachers reporting that they felt very well prepared to meet the overall demands of their classroom assignments was related to the extent to which professional development was linked to other program improvements and follow-up activities at the school (table 14). This relationship held for every program improvement and follow-up activity examined in the survey. For example, teachers who indicated that their professional development was linked to other program improvements at the school to a large or moderate extent were more likely to report feeling very well prepared to meet the overall demands of their classroom assignments, compared with teachers whose professional development was linked to a small extent or not at all (65 versus 56 percent).

- For three collaborative activities related to teaching—regularly scheduled collaboration with other teachers, networking with teachers outside the school, and mentoring another teacher in a formal relationship—the proportion of teachers who felt very well prepared for the overall demands of their classroom assignments differed by whether the teacher participated in the activity (table 15). For example, teachers who engaged in regularly scheduled collaboration with other teachers were more likely than those who did not participate in the activity to indicate that they felt very well prepared for the overall demands of their teaching assignments (63 versus 57 percent).

Selected Comparisons With the 1998 Survey

The 2000 survey was designed to provide trend data that would allow an examination of changes in teacher education and professional development. To analyze possible changes since 1998, data from the two surveys were compared along two dimensions—teacher participation in professional development and collaborative activities, and teachers' feelings of preparedness.

These findings are presented in a separate section because comparisons are based on a subset of teachers from the 2000 study that is similar to the teachers sampled for the 1998 survey. For these analyses, the 2000 survey sample was restricted to regular full-time public school teachers in grades 1 through 12 whose main teaching assignment was in English, math, social studies, foreign languages, or science, or who taught in a self-contained classroom. Part-time, itinerant, and substitute teachers were excluded, as were "pull-out" teachers and those whose main teaching assignment was not a core subject area (see appendix A for details).

Teacher Professional Development and Collaboration

Comparisons between 1998 and 2000 are presented for regular full-time public school teachers who participated in professional development that focused on seven topics that were comparable across the surveys: state or district curriculum and performance standards, integration of educational technology in the grade or subject taught, new methods of teaching, in-depth study in the subject area of the main teaching assignment, student performance assessment, addressing the needs of students with disabilities, and classroom management, including student discipline. Comparisons between 1998 and 2000 are also presented for teachers who reported that they participated in six activities related to teaching: regularly scheduled collaboration with other teachers, networking with teachers outside the school, common planning period for team teachers, individual or collaborative research on a topic of interest professionally, mentoring another teacher in a formal relationship, and being mentored by another teacher.

- The proportion of regular full-time teachers indicating that they participated in professional development was lower in 2000 than 1998 for three of the seven content areas that were comparable across years—new methods of teaching (73 versus 77 percent), student performance assessment (62 versus 67 percent), and classroom management, including student discipline (43 versus 49 percent; table 16).

- In 1998 and 2000, teacher participation in professional development was likely to be short term, typically lasting for 1 to 8 hours (table 16). For example, in both years, 62 percent of the teachers spent 1 to 8 hours while 38 percent spent more than 8 hours on professional development that focused on the integration of technology in the grade or subject taught. The one exception was professional development programs on in-depth study in the subject area of the main teaching assignment; teacher participation in these programs was relatively long term, typically lasting more than 8 hours.

- Teachers in 2000 were less likely than those in 1998 to participate in two of the six activities related to teaching—regularly scheduled collaboration with other teachers (71 versus 81 percent) and common planning period for team teachers (56 versus 62 percent; table 17).

However, a higher proportion of teachers reported being mentored by another teacher in 2000 than in 1998 (22 versus 19 percent).

Teachers' Feelings of Preparedness

Comparisons between 1998 and 2000 are presented for regular full-time public school teachers who reported the extent to which they felt prepared to meet the following classroom demands: maintaining order and discipline in the classroom, implementing new methods of teaching, implementing state or district curriculum and performance standards, using student performance assessment, addressing the needs of students with disabilities, and integrating educational technology into the grade or subject taught.

- In 1998 and 2000, regular full-time public school teachers most often reported that they felt very well prepared to maintain order and discipline in the classroom (table 18). In both years, teachers were least likely to report feeling very well prepared to integrate educational technology in the grade or subject taught (20 and 27 percent, respectively) and address the needs of students with disabilities (21 and 29 percent, respectively).

- For all but one classroom activity examined in the surveys, regular full-time public school teachers in 2000 were more likely than those in 1998 to report that they felt very well prepared to meet the requirement (table 18). The exception is maintaining order and discipline in the classroom; for both years, a similarly high proportion of teachers (71 and 72 percent) felt very well prepared for this classroom demand.

References

Chowdhury, S., Chu, A., and Kaufman, S. (forthcoming). Minimizing Overlap in NCES Surveys. *Proceedings of the Survey Methods Research Section. American Statistical Association.*

Choy, S., and Chen, X. (1998). *Toward Better Professional Development in 1993–94.* (NCES 98–230). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Darling-Hammond, L. (2000). Teacher Quality and Student Achievement: A Review of State Policy Evidence. *Education Policy Analysis Archives,* 8, 1. Available: http://olam.ed.asu.edu/epaa/v8n1/

Fullan, M., with Steigelbauer, S. (1991). *The New Meaning of Educational Change.* New York: Teacher's College Press.

Henke, R., Chen, X., and Geis, S. (2000). *Progress Through the Teacher Pipeline: 1992–93 College Graduates and Elementary/Secondary School Teaching as of 1997.* (NCES 2000–152). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Lewis, L., Parsad, B., Carey, N., Bartfai, N., Farris, E., and Smerdon, B. (1999). *Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers.* (1999). (NCES 1999–080). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Lieberman, A., and Grolnick, A. (1996). Networks and Reform in American Education. *Teachers College Record,* 1,1, 7–49.

Little, J. W. (1993). *Teachers' Professional Development in a Climate of Educational Reform.* New York: National Center for Restructuring Education, Schools and Teaching.

Mayer, D., Mullens, J., and Moore, M. (2001). *Monitoring School Quality.* (NCES 2001–030). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Mullens, J., Leighton, M., Laguarda, K., and O'Brien, E. (1996). *Student Learning, Teacher Quality, and Professional Development: Theoretical Linkages, Current Measurement, and Recommendations for Future Data Collection.* (NCES 96–28). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

National Commission on Teaching and America's Future. (1996). *What Matters Most: Teaching for America's Future.* New York: NCTAF.

Sprinthall, N., Reiman, A., and Theis-Sprinthall, L. (1996). Teacher Professional Development. In *Handbook of Research on Teacher Education.* Eds. J. Sikula, T. Buttery, and E. Guyton. New York: Simon & Schuster Macmillan.

Table 1.—Percent of public school teachers who hold bachelor's, master's, doctorates, other degrees, and/or other certificates, by selected teacher and school characteristics: 2000

Teacher and school characteristic	Bachelor's degree	Master's degree	Doctorate degree	Other degree	Other certificate(s)
Public school teachers	100*	45	1	1	18
Teaching experience					
3 or fewer years	100*	20	1	1	11
4 to 9 years	100*	37	1	1	17
10 or more years	99	54	1	1	20
School instructional level					
Elementary school	100*	44	††	1	18
Middle school	100	44	1	1	16
High school	100*	48	1	1	19
Combined school	99	37	2	2	19
School enrollment size					
Less than 500	100	40	††	2	17
500 to 999	100*	46	1	1	17
1,000 or more	100*	49	1	1	21
School locale					
Central city	100*	46	1	2	19
Urban fringe/large town	100*	47	1	1	21
Rural/small town	100*	39	††	1	13
Percent minority enrollment in school					
5 percent or less	100	45	††	1	13
6 to 20 percent	100*	47	1	1	19
21 to 50 percent	100*	44	††	1	19
More than 50 percent	100*	43	2	1	22
Percent of students in school eligible for free or reduced-price lunch					
Less than 35 percent	100*	48	1	1	18
35 to 49 percent	100*	37	††	1	15
50 to 74 percent	100	42	††	1	18
75 percent or more	100*	42	2	2	18

†† Less than 0.5 percent.

*Rounds to 100 percent for presentation in the tables.

NOTE: Analyses are based on all public school teachers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 1a.—Standard errors of the percent of public school teachers who hold bachelor's, master's, doctorates, other degrees, and/or other certificates, by selected teacher and school characteristics: 2000

Teacher and school characteristic	Bachelor's degree	Master's degree	Doctorate degree	Other degree	Other certificate(s)
Public school teachers	0.1	1.0	0.2	0.2	0.8
Teaching experience					
3 or fewer years	0.3	1.8	0.5	0.6	1.4
4 to 9 years	0.1	2.2	0.4	0.3	1.6
10 or more years	0.1	1.4	0.2	0.2	1.2
School instructional level					
Elementary school	0.1	1.7	††	0.3	1.2
Middle school	††	1.3	0.2	0.3	0.9
High school	0.2	1.8	0.5	0.4	1.4
Combined school	0.5	3.7	1.0	0.9	3.5
School enrollment size					
Less than 500	††	2.1	††	0.5	1.6
500 to 999	0.1	1.2	0.3	0.2	1.1
1,000 or more	0.3	1.9	0.4	0.4	1.7
School locale					
Central city	0.2	1.9	0.4	0.5	1.6
Urban fringe/large town	0.3	1.4	0.3	0.3	1.2
Rural/small town	0.1	1.8	††	0.3	1.3
Percent minority enrollment in school					
5 percent or less	††	2.3	††	0.5	1.1
6 to 20 percent	0.3	2.2	0.3	0.4	1.7
21 to 50 percent	0.1	1.9	††	0.4	1.6
More than 50 percent	0.2	1.9	0.6	0.3	1.8
Percent of students in school eligible for free or reduced-price lunch					
Less than 35 percent	0.1	1.5	0.2	0.3	1.1
35 to 49 percent	0.2	2.8	††	0.5	2.1
50 to 74 percent	††	2.6	††	0.4	2.0
75 percent or more	0.3	2.7	0.8	0.5	2.2

†† Estimate of standard error is not derived because it is based on a statistic estimated at 0 or 100 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 2.—Percent of public school teachers who participated in professional development activities during the last 12 months that focused on various content areas, by the number of hours spent on the activity: 2000

Content area	Participated in activity	Total hours spent		
		1 to 8	9 to 32	More than 32
State or district curriculum and performance standards	80	57	31	12
Integration of educational technology in the grade or subject taught	74	61	28	11
In-depth study in the subject area of main teaching assignment	72	43	34	23
New methods of teaching (e.g., cooperative learning)	72	59	29	11
Student performance assessment (e.g., methods of testing, applying results to modify instruction)	62	67	25	8
Addressing the needs of students with disabilities	49	72	19	8
Encouraging parent and community involvement	46	75	18	8
Classroom management, including student discipline	45	73	20	7
Addressing the needs of students from diverse cultural backgrounds	41	71	20	9
Addressing the needs of students with limited English proficiency	26	68	20	12

NOTE: Percentages for total hours spent in the activity are based on public school teachers who participated in professional development over the 12 months preceding the survey. Percents are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 2a.—Standard errors of the percent of public school teachers who participated in professional development activities during the last 12 months that focused on various content areas, by the number of hours spent on the activity: 2000

Content area	Participated in activity	Total hours spent		
		1 to 8	9 to 32	More than 32
State or district curriculum and performance standards	0.7	1.1	1.2	0.8
Integration of educational technology in the grade or subject taught	0.9	1.1	0.9	0.7
In-depth study in the subject area of main teaching assignment	0.8	1.0	1.0	0.9
New methods of teaching (e.g., cooperative learning)	0.9	1.1	1.2	0.8
Student performance assessment (e.g., methods of testing, applying results to modify instruction)	1.0	1.4	1.2	0.7
Addressing the needs of students with disabilities	1.0	1.2	0.9	0.7
Encouraging parent and community involvement	1.2	1.4	1.0	0.9
Classroom management, including student discipline	1.1	1.3	1.0	0.7
Addressing the needs of students from diverse cultural backgrounds	1.1	1.6	1.5	0.9
Addressing the needs of students with limited English proficiency	1.1	1.6	1.5	1.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 3.—Percent of public school teachers who participated in professional development activities during the last 12 months, by content area and selected teacher and school characteristics: 2000

Teacher and school characteristic	Content area									
	State or district curriculum	Integration of education technology	In-depth study in main subject area	New methods of teaching	Student performance assessment	Needs of students with disabilities	Parent and community involvement	Classroom management	Needs of students from diverse cultural backgrounds	Needs of students with limited English proficiency
All public school teachers	80	74	72	72	62	49	46	45	41	26
Teaching experience										
3 or fewer years	80	72	76	76	61	51	46	63	45	30
4 to 9 years	82	76	75	79	65	50	48	50	43	27
10 or more years	80	74	70	68	61	49	45	39	40	24
Instructional level										
Elementary school	81	75	78	73	66	52	48	47	44	28
Middle school	80	73	69	73	62	51	46	47	41	27
High school	80	74	66	70	57	44	43	42	41	23
Combined school	76	70	61	67	49	44	45	41	28	16
School enrollment size										
Less than 500	82	78	73	73	63	53	49	45	37	20
500 to 999	80	71	74	73	63	50	46	47	42	27
1,000 or more	80	73	67	70	59	44	43	44	46	30
School locale										
Central city	82	72	75	74	65	50	45	50	51	32
Urban fringe/large town	80	75	72	72	61	49	46	43	43	27
Rural/small town	80	74	69	69	61	49	47	44	30	16
Percent minority enrollment in school										
5 percent or less	80	74	68	70	60	50	43	42	22	10
6 to 20 percent	78	76	72	68	59	49	46	40	40	20
21 to 50 percent	80	74	72	73	62	46	44	47	47	31
More than 50 percent	83	72	77	77	67	51	50	52	58	42
Percent of students in school eligible for free or reduced-price lunch										
Less than 35 percent	80	75	70	70	60	48	43	41	35	20
35 to 49 percent	78	74	71	70	59	52	49	46	44	25
50 to 74 percent	82	73	74	74	66	47	48	49	45	32
75 percent or more	83	70	78	78	67	54	52	58	56	40

NOTE: Data presented in this table are based on teachers' reports of their participation in professional development during the 12 months preceding the survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 3a.—Standard errors of the percent of public school teachers who participated in professional development activities during the last 12 months, by content area and selected teacher and school characteristics: 2000

Teacher and school characteristic	Content area									
	State or district curriculum	Integration of education technology	In-depth study in main subject area	New methods of teaching	Student performance assessment	Needs of students with disabilities	Parent and community involvement	Classroom management	Needs of students from diverse cultural backgrounds	Needs of students with limited English proficiency
All public school teachers	0.7	0.9	0.8	0.9	1.0	1.0	1.2	1.1	1.1	1.1
Teaching experience										
3 or fewer years	1.8	2.3	1.9	2.0	2.1	2.3	2.0	1.8	2.2	1.9
4 to 9 years	1.4	1.8	1.5	1.9	2.0	2.2	2.4	2.2	2.4	2.3
10 or more years	1.1	1.2	1.2	1.3	1.2	1.4	1.5	1.4	1.4	1.3
Instructional level										
Elementary school	1.4	1.5	1.3	1.5	1.9	1.6	2.0	1.8	2.0	2.1
Middle school	1.2	1.7	1.2	1.4	1.6	1.3	1.5	1.5	1.6	1.2
High school	1.3	1.5	1.3	1.4	1.5	1.8	1.7	1.9	1.6	1.5
Combined school	3.8	3.1	3.1	3.2	4.2	3.2	3.3	3.5	3.6	3.2
School enrollment size										
Less than 500	1.3	1.4	1.7	1.4	2.0	1.8	2.0	2.2	1.8	1.8
500 to 999	1.3	1.6	1.2	1.6	1.5	1.7	1.7	1.6	1.6	1.6
1,000 or more	1.4	1.5	1.6	1.6	1.6	1.9	1.7	2.0	2.1	1.7
School locale										
Central city	1.2	1.5	1.5	1.6	2.1	1.8	2.1	1.9	1.6	1.8
Urban fringe/large town	1.2	1.2	1.5	1.3	1.5	1.6	1.8	1.7	1.7	1.7
Rural/small town	1.6	1.6	1.0	1.6	1.8	1.5	1.8	1.8	1.7	1.1
Percent minority enrollment in school										
5 percent or less	1.3	1.6	1.5	1.4	2.1	1.7	1.9	1.8	1.4	1.2
6 to 20 percent	1.8	1.7	1.5	2.0	2.5	2.3	2.2	2.1	2.1	1.9
21 to 50 percent	1.5	1.5	1.7	1.7	2.1	1.8	2.0	2.0	2.2	2.2
More than 50 percent	1.5	1.7	1.8	1.4	2.2	2.2	2.2	2.2	2.2	2.0
Percent of students in school eligible for free or reduced-price lunch										
Less than 35 percent	1.0	1.1	1.3	1.1	1.3	1.3	1.6	1.5	1.5	1.3
35 to 49 percent	2.2	2.5	2.4	2.9	3.0	2.4	2.9	2.8	3.0	2.7
50 to 74 percent	1.8	2.0	2.4	2.1	2.5	2.4	2.7	2.4	2.7	2.7
75 percent or more	2.3	2.6	2.2	2.4	2.9	2.7	3.3	3.3	2.9	2.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 4.—Percent of public school teachers indicating the extent to which their participation in professional development during the last 12 months has been linked to or followed by various school-based activities related to the teachers' professional development experience: 2000

School-based activity	To a great extent	To a moderate extent	To a small extent	Not at all
Professional development has been:				
Linked to other program improvement activities at the school	18	38	29	15
Followed by school administration support in applying what was learned	15	28	33	24
Followed by needed follow-up sessions or additional training	11	24	33	32
Followed by school activities in which teachers help other teachers put the new ideas to use	10	22	32	35

NOTE: Data presented in this table are based on public school teachers who participated in professional during the 12 months preceding the survey (99 percent). Percents are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 4a.—Standard errors of the percent of public school teachers indicating the extent to which their participation in professional development during the last 12 months has been linked to or followed by various school-based activities related to the teachers' professional development experience: 2000

School-based activity	To a great extent	To a moderate extent	To a small extent	Not at all
Professional development has been:				
Linked to other program improvement activities at the school	0.7	0.8	0.9	0.7
Followed by school administration support in applying what was learned	0.7	0.9	0.9	0.7
Followed by needed follow-up sessions or additional training	0.7	0.9	0.8	0.8
Followed by school activities in which teachers help other teachers put the new ideas to use	0.6	0.9	0.9	0.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 5.—Percent of public school teachers indicating the extent to which participation in professional development activities in various content areas during the last 12 months improved their teaching: 2000

Content area	Improved classroom teaching			
	A lot	Moderately	Somewhat	Not at all
In-depth study in the subject area of main teaching assignment	27	44	27	2
Integration of educational technology in the grade or subject taught	23	38	33	6
New methods of teaching (e.g., cooperative learning)	20	41	34	4
Addressing the needs of students with disabilities	18	35	42	6
Student performance assessment (e.g., methods of testing, applying results to modify instruction)	16	40	37	7
Classroom management, including student discipline	16	40	37	7
Addressing the needs of students with limited English proficiency	16	34	43	7
Addressing the needs of students from diverse cultural backgrounds	15	35	42	8
State or district curriculum and performance standards	14	35	39	11
Encouraging parent and community involvement	12	34	42	11

NOTE: Data presented in this table are based on public school teachers who participated in professional development during the 12 months preceding the survey. Percents are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 5a.—Standard errors of the percent of public school teachers indicating the extent to which participation in professional development activities in various content areas during the last 12 months improved their teaching: 2000

Content area	Improved classroom teaching			
	A lot	Moderately	Somewhat	Not at all
In-depth study in the subject area of main teaching assignment	1.0	1.3	1.0	0.3
Integration of educational technology in the grade or subject taught	1.1	1.2	1.0	0.5
New methods of teaching (e.g., cooperative learning)	0.8	1.2	1.2	0.5
Addressing the needs of students with disabilities	1.4	1.4	1.5	0.7
Student performance assessment (e.g., methods of testing, applying results to modify instruction)	0.8	1.4	1.3	0.7
Classroom management, including student discipline	1.2	1.8	1.4	0.7
Addressing the needs of students with limited English proficiency	1.5	2.0	1.8	0.9
Addressing the needs of students from diverse cultural backgrounds	1.1	1.3	1.7	0.7
State or district curriculum and performance standards	0.7	1.0	0.9	0.6
Encouraging parent and community involvement	0.9	1.6	1.6	0.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 6.—Percent of public school teachers indicating the extent to which participation in professional development activities in various content areas during the last 12 months improved their teaching, by the number of hours spent in professional development in the content area: 2000

Content area and hours spent	Improved classroom teaching			
	A lot	Moderately	Somewhat	Not at all
In-depth study in the subject area of main teaching assignment				
1 to 8 hours	13	45	37	4
More than 8 hours	37	43	19	††
New methods of teaching (e.g., cooperative learning)				
1 to 8 hours	11	41	43	6
More than 8 hours	33	43	22	2
State or district curriculum and performance standards				
1 to 8 hours	8	33	45	14
More than 8 hours	23	39	30	9
Integration of educational technology in the grade or subject taught				
1 to 8 hours	13	38	42	7
More than 8 hours	38	38	20	3
Student performance assessment (e.g., methods of testing, applying results to modify instruction)				
1 to 8 hours	11	37	43	10
More than 8 hours	26	46	25	3
Classroom management, including student discipline				
1 to 8 hours	10	39	44	8
More than 8 hours	33	45	19	3
Addressing the needs of students from diverse cultural backgrounds				
1 to 8 hours	8	31	51	10
More than 8 hours	32	44	21	3
Addressing the needs of students with limited English proficiency				
1 to 8 hours	8	31	52	10
More than 8 hours	34	39	24	2
Addressing the needs of students with disabilities				
1 to 8 hours	11	33	49	7
More than 8 hours	34	41	23	2
Encouraging parent and community involvement				
1 to 8 hours	7	32	48	14
More than 8 hours	28	42	26	4

†† Less than 0.5 percent.

NOTE: Data presented in this table are based on public school teachers who participated in professional development during the 12 months preceding the survey. Percents are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 6a.—Standard errors of the percent of public school teachers indicating the extent to which participation in professional development activities in various content areas during the last 12 months improved their teaching, by the number of hours spent in professional development in the content area: 2000

Content area and hours spent	Improved classroom teaching			
	A lot	Moderately	Somewhat	Not at all
In-depth study in the subject area of main teaching assignment				
1 to 8 hours	1.2	1.8	1.6	0.8
More than 8 hours	1.4	1.7	1.2	††
New methods of teaching (e.g., cooperative learning)				
1 to 8 hours	1.0	1.3	1.6	0.7
More than 8 hours	1.9	2.0	1.4	0.5
State or district curriculum and performance standards				
1 to 8 hours	0.9	1.5	1.2	0.8
More than 8 hours	1.3	1.5	1.3	0.9
Integration of educational technology in the grade or subject taught				
1 to 8 hours	1.2	1.4	1.4	0.7
More than 8 hours	1.6	1.7	1.3	0.6
Student performance assessment (e.g., methods of testing, applying results to modify instruction)				
1 to 8 hours	0.9	1.9	1.7	0.9
More than 8 hours	1.5	2.5	1.8	0.7
Classroom management, including student discipline				
1 to 8 hours	1.1	2.1	2.1	0.9
More than 8 hours	2.8	2.8	2.0	0.8
Addressing the needs of students from diverse cultural backgrounds				
1 to 8 hours	1.0	1.5	1.9	1.0
More than 8 hours	2.9	3.3	2.1	0.9
Addressing the needs of students with limited English proficiency				
1 to 8 hours	1.2	2.2	2.5	1.2
More than 8 hours	3.5	3.6	2.2	0.9
Addressing the needs of students with disabilities				
1 to 8 hours	1.2	1.6	1.8	1.0
More than 8 hours	2.9	2.8	1.8	0.9
Encouraging parent and community involvement				
1 to 8 hours	0.7	1.9	1.9	0.9
More than 8 hours	2.7	2.7	2.6	1.1

†† Estimate of standard error is not derived because it is based on a statistic estimated at less than 0.5 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 7.—Percent of public school teachers indicating that participation in professional development activities in various content areas during the last 12 months improved their teaching a lot or moderately, by the extent to which professional development has been linked to various school-based activities: 2000

School-based activity	Content area									
	State or district curriculum	Integration of education technology	In-depth study in main subject area	New methods of teaching	Student performance assessment	Needs of students with disabilities	Parent and community involvement	Classroom management	Needs of students from diverse cultural backgrounds	Needs of students with limited English proficiency
Professional development has been:										
Linked to other program improvements at the school										
To a large/moderate extent	57	68	76	67	62	58	53	61	56	56
To a small extent/not at all	39	50	64	53	46	45	37	50	41	41
Followed by needed follow-up sessions or additional training										
To a large/moderate extent	63	72	80	72	69	64	58	64	60	59
To a small extent/not at all	42	54	65	55	47	46	38	51	43	43
Followed by school activities in which teachers helped other teachers put the new ideas to use										
To a large/moderate extent	63	73	79	72	66	63	58	66	61	59
To a small extent/not at all	43	54	66	56	50	46	39	51	43	44
Followed by school administration support in applying what was learned										
To a large/moderate extent	62	71	79	73	68	62	57	64	58	60
To a small extent/not at all	41	52	64	52	45	45	36	49	43	41

NOTE: Data presented in this table are based on public school teachers who participated in professional development during the 12 months preceding the survey; 99 percent of teachers participated in at least one of the professional development activities examined in the survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 7a.—Standard errors of the percent of public school teachers indicating that participation in professional development activities in various content areas during the last 12 months improved their teaching a lot or moderately, by the extent to which professional development has been linked to various school-based activities: 2000

School-based activity	Content area									
	State or district curriculum	Integration of education technology	In-depth study in main subject area	New methods of teaching	Student performance assessment	Needs of students with disabilities	Parent and community involvement	Classroom management	Needs of students from diverse cultural backgrounds	Needs of students with limited English proficiency
Professional development has been:										
Linked to other program improvements at the school										
To a large/moderate extent ..	1.3	1.2	1.5	1.4	1.9	1.9	2.0	2.0	1.9	2.3
To a small extent/not at all ..	1.4	1.5	1.7	2.0	2.1	2.3	2.1	2.2	2.3	3.1
Followed by needed follow-up sessions or additional training										
To a large/moderate extent ..	1.7	1.8	1.6	1.7	2.1	2.3	2.2	2.6	2.6	2.5
To a small extent/not at all ..	1.3	1.4	1.3	1.6	1.7	1.9	2.0	2.3	2.0	2.3
Followed by school activities in which teachers helped other teachers put the new ideas to use										
To a large/moderate extent ..	1.6	1.8	1.9	1.9	2.2	2.2	2.7	2.4	2.7	2.6
To a small extent/not at all ..	1.2	1.3	1.1	1.5	1.6	1.9	2.0	2.2	1.6	2.5
Followed by school administration support in applying what was learned										
To a large/moderate extent ..	1.4	1.5	1.6	1.4	2.0	2.0	2.2	2.2	2.5	2.5
To a small extent/not at all ..	1.4	1.3	1.3	1.6	1.8	2.0	1.9	2.4	1.9	2.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 8.—Percent of public school teachers who participated in various activities related to teaching during the last 12 months, by frequency of participation: 2000

Activity	Participated in activity	Frequency of participation			
		At least once a week	2 to 3 times a month	Once a month	A few times a year
Regularly scheduled collaboration with other teachers, excluding meetings held for administrative purposes	69	31	18	24	27
Networking with teachers outside the school	62	10	13	19	58
Common planning period for team teachers	53	60	13	9	17
Individual or collaborative research on a topic of interest professionally	52	20	16	17	47
Mentoring another teacher in a formal relationship	26	44	20	10	26
Being mentored by another teacher	23	35	13	14	38

NOTE: Percentages for the frequency of participation are based on teachers who participated in the activity during the 12 months preceding the survey. Percents are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 8a.—Standard errors of the percent of public school teachers who participated in various activities related to teaching during the last 12 months, by frequency of participation: 2000

Activity	Participated in activity	Frequency of participation			
		At least once a week	2 to 3 times a month	Once a month	A few times a year
Regularly scheduled collaboration with other teachers, excluding meetings held for administrative purposes	1.0	1.0	0.9	0.9	1.0
Networking with teachers outside the school	0.8	0.7	0.9	1.1	1.3
Common planning period for team teachers	0.9	1.7	1.1	0.9	1.1
Individual or collaborative research on a topic of interest professionally	1.0	1.0	0.9	1.0	1.3
Mentoring another teacher in a formal relationship	0.8	2.0	1.6	1.0	1.6
Being mentored by another teacher	0.9	1.7	1.3	1.6	2.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 9.—Percent of public school teachers indicating the extent to which participation in various teaching-related activities during the last 12 months improved their teaching: 2000

Activity	Improved classroom teaching			
	A lot	Moderately	Somewhat	Not at all
Being mentored by another teacher in a formal relationship	37	29	27	8
Common planning period for team teachers	35	33	26	6
Individual or collaborative research on a topic of interest professionally	30	35	32	2
Regularly scheduled collaboration with other teachers, excluding meetings held for administrative purposes	24	35	36	4
Networking with teachers outside the school	20	33	42	4
Mentoring another teacher in a formal relationship	18	34	38	10

NOTE: Data presented in this table are based on public school teachers who participated in the teaching-related activity during the 12 months preceding the survey. Percents are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 9a.—Standard errors of the percent of public school teachers indicating the extent to which participation in various teaching-related activities during the last 12 months improved their teaching: 2000

Activity	Improved classroom teaching			
	A lot	Moderately	Somewhat	Not at all
Being mentored by another teacher in a formal relationship	2.2	2.2	2.1	1.0
Common planning period for team teachers	1.3	1.3	1.4	0.6
Individual or collaborative research on a topic of interest professionally	1.1	1.3	1.4	0.5
Regularly scheduled collaboration with other teachers, excluding meetings held for administrative purposes	1.0	1.3	1.1	0.5
Networking with teachers outside the school	0.8	1.1	1.2	0.5
Mentoring another teacher in a formal relationship	1.3	1.8	1.7	1.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 10.—Percent of public school teachers indicating the extent to which participation in various teaching-related activities improved their teaching, by the frequency with which they participated in that activity during the last 12 months: 2000

Activity and frequency of participation	Improved classroom teaching			
	A lot	Moderately	Somewhat	Not at all
Regularly scheduled collaboration with other teachers, excluding meetings held for administrative purposes				
At least once a week	45	34	18	2
2 to 3 times a month	23	50	26	2
Once a month	15	35	45	5
A few times a year	7	28	56	8
Common planning period for team teachers				
At least once a week	45	31	19	4
2 to 3 times a month	29	53	15	4
Once a month	17	41	37	6
A few times a year	12	22	50	16
Networking with teachers outside the school				
At least once a week	42	38	20	1
2 to 3 times a month	33	43	24	1
Once a month	26	39	33	2
A few times a year	12	29	54	6
Individual or collaborative research on a topic of interest professionally				
At least once a week	57	30	12	1
2 to 3 times a month	39	45	15	††
Once a month	26	41	32	1
A few times a year	16	32	47	4
Mentoring another teacher in a formal relationship				
At least once a week	28	39	26	7
2 to 3 times a month	15	36	38	11
Once a month	13	32	46	9
A few times a year	7	25	54	15
Being mentored by another teacher in a formal relationship				
At least once a week	66	24	10	††
2 to 3 times a month	38	35	21	5
Once a month	31	37	28	3
A few times a year	11	27	45	17

†† Less than 0.5 percent.

NOTE: Data presented in this table are based on public school teachers who participated in the teaching-related activity during the 12 months preceding the survey. Percents are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 10a.—Standard errors of the percent of public school teachers indicating the extent to which participation in various teaching-related activities improved their teaching, by the frequency with which they participated in that activity during the last 12 months: 2000

Activity and frequency of participation	Improved classroom teaching			
	A lot	Moderately	Somewhat	Not at all
Regularly scheduled collaboration with other teachers, excluding meetings held for administrative purposes				
At least once a week	1.8	2.0	1.6	0.7
2 to 3 times a month	2.5	2.8	2.3	0.9
Once a month	1.7	2.6	2.6	1.0
A few times a year	1.2	2.1	1.9	1.3
Common planning period for team teachers				
At least once a week	1.5	1.5	1.3	0.6
2 to 3 times a month	3.9	4.4	2.6	1.3
Once a month	4.1	4.3	3.6	2.0
A few times a year	2.6	2.7	3.9	2.4
Networking with teachers outside the school				
At least once a week	3.9	4.2	3.0	0.8
2 to 3 times a month	3.1	3.3	2.6	0.6
Once a month	2.4	2.9	2.5	1.2
A few times a year	1.0	1.4	1.6	0.8
Individual or collaborative research on a topic of interest professionally				
At least once a week	2.7	2.7	1.7	0.6
2 to 3 times a month	3.0	3.4	2.1	††
Once a month	2.8	2.6	2.8	0.4
A few times a year	1.4	1.9	2.0	1.0
Mentoring another teacher in a formal relationship				
At least once a week	2.3	2.7	2.3	1.5
2 to 3 times a month	2.9	5.0	4.5	3.2
Once a month	5.2	5.6	5.7	3.4
A few times a year	2.0	3.1	3.6	2.8
Being mentored by another teacher in a formal relationship				
At least once a week	3.2	3.1	1.9	††
2 to 3 times a month	5.8	4.9	4.2	2.4
Once a month	5.6	6.8	4.6	2.2
A few times a year	2.2	3.0	4.3	2.5

†† Estimate of standard error is not derived because it is based on a statistic estimated at less than 0.5 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 11.—Percent of public school teachers indicating how well prepared they felt for various activities in the classroom: 2000

Activity	How well prepared teachers felt			
	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared
Meet the overall demands of teaching assignments	61	35	4	††
Maintain order and discipline in the classroom	71	24	4	1
Implement new methods of teaching (e.g., cooperative learning)	45	42	12	2
Implement state or district curriculum and performance standards	44	39	15	2
Use student performance assessment (e.g., methods of testing, applying results to modify instruction)	37	40	20	3
Address the needs of students from diverse cultural backgrounds	32	39	23	6
Address the needs of students with disabilities*	32	38	24	5
Integrate educational technology in the grade or subject taught	27	38	27	7
Address the needs of students with limited English proficiency*	27	33	28	12

†† Less than 0.5 percent.

* Data are based on teachers who reported that they taught students with these characteristics at the school—86 percent taught special education students with Individual Education Plans (IEPs), and 42 percent taught students with limited English proficiency.

NOTE: Percents are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 11a.—Standard errors of the percent of public school teachers indicating how well prepared they felt for various activities in the classroom: 2000

Activity	How well prepared teachers felt			
	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared
Meet the overall demands of teaching assignments	0.9	0.8	0.4	††
Maintain order and discipline in the classroom	0.8	0.7	0.4	0.2
Implement new methods of teaching (e.g., cooperative learning)	0.9	0.9	0.7	0.3
Implement state or district curriculum and performance standards	1.1	0.9	0.8	0.3
Use student performance assessment (e.g., methods of testing, applying results to modify instruction)	0.7	0.9	0.8	0.3
Address the needs of students from diverse cultural backgrounds	1.0	0.7	0.8	0.5
Address the needs of students with disabilities	1.0	1.1	1.0	0.1
Integrate educational technology in the grade or subject taught	0.9	1.0	0.9	0.5
Address the needs of students with limited English proficiency	1.4	1.4	1.2	1.1

†† Estimate of standard error is not derived because it is based on a statistic estimated at less than 0.5 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 12.—Percent of public school teachers indicating they felt very well prepared for various activities in the classroom, by selected teacher and school characteristics: 2000

Teacher and school characteristic	Activity								
	Meet overall demands of teaching assign-ments	Maintain order and discipline in the classroom	Implement new methods of teaching	Implement state or district curriculum	Use Student perform-ance assess-ment	Address needs of students from diverse cultural back-grounds	Address needs of students with disabil-ities*	Integrate education technology	Address needs of students with limited English profi-ciency*
All public school teachers	61	71	45	44	37	32	32	27	27
Teaching experience									
3 or fewer years	49	51	37	36	26	26	28	23	21
4 to 9 years	54	69	40	41	34	31	30	29	24
10 or more years	67	77	48	47	41	35	34	28	30
Instructional level									
Elementary school	60	71	46	43	39	33	36	24	32
Middle school	61	72	47	45	38	33	33	28	25
High school	63	69	43	43	33	31	27	31	21
Combined school	61	72	32	46	29	26	29	28	25
School enrollment size									
Less than 500	59	72	42	42	37	27	35	24	29
500 to 999	61	71	46	44	38	33	32	26	26
1,000 or more	63	68	45	45	35	37	29	33	27
School locale									
Central city	60	68	48	45	38	40	33	30	33
Urban fringe/large town	63	72	46	45	38	34	32	26	25
Rural/small town	59	72	39	39	33	22	32	26	20
Percent minority enrollment in school									
5 percent or less	61	73	40	38	31	17	30	24	13
6 to 20 percent	61	73	46	43	37	29	33	26	18
21 to 50 percent	62	72	46	48	39	37	34	31	28
More than 50 percent	61	66	47	46	41	46	32	28	37
Percent of students in school eligible for free or reduced-price lunch									
Less than 35 percent	62	72	43	42	35	29	32	26	22
35 to 49 percent	60	71	42	42	38	29	33	28	24
50 to 74 percent	60	70	47	46	40	37	32	29	32
75 percent or more	60	67	48	47	40	40	34	30	35

* Data are based on teachers who reported that they taught students with these characteristics at the school—86 percent taught special education students with Individual Education Plans (IEPs), and 42 percent taught students with limited English proficiency.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 12a.—Standard errors of the percent of public school teachers indicating they felt very well prepared for various activities in the classroom, by selected teacher and school characteristics: 2000

Teacher and school characteristic	Activity								
	Meet overall demands of teaching assign-ments	Maintain order and discipline in the classroom	Implement New methods of teaching	Implement state or district curriculum	Use Student perform-ance assess-ment	Address needs of students from diverse cultural back-grounds	Address needs of students with disabil-ities	Integrate education technology	Address needs of students with limited English profi-ciency
All public school teachers	0.9	0.8	0.9	1.1	0.7	1.0	0.9	0.9	1.4
Teaching experience									
3 or fewer years	2.2	2.2	2.3	2.1	1.7	2.1	2.1	2.0	3.0
4 to 9 years	2.3	1.8	2.1	2.0	1.9	2.1	1.8	1.7	2.7
10 or more years	1.1	1.0	1.2	1.5	0.9	1.1	1.5	1.4	1.9
Instructional level									
Elementary school	1.5	1.3	1.6	1.8	1.2	1.7	1.6	1.6	2.6
Middle school	1.3	1.2	1.0	1.3	1.3	1.2	1.2	1.2	1.8
High school	1.9	1.6	1.7	1.8	1.6	1.9	1.8	1.5	1.9
Combined school	4.1	4.0	3.6	4.7	3.2	2.7	3.5	2.9	6.5
School enrollment size									
Less than 500	1.7	1.8	1.8	1.8	1.7	1.5	1.7	2.0	2.6
500 to 999	1.4	1.4	1.4	1.6	1.2	1.6	1.5	1.4	2.1
1,000 or more	1.7	1.6	2.0	1.6	1.6	2.0	2.0	1.5	2.3
School locale									
Central city	1.6	1.7	2.0	1.9	1.6	1.8	2.0	1.9	2.5
Urban fringe/large town	1.6	1.4	1.8	1.8	1.3	1.4	1.6	1.3	2.2
Rural/small town	1.4	1.5	1.5	1.3	1.4	1.5	1.6	1.7	2.4
Percent minority enrollment in school									
5 percent or less	1.5	1.6	1.8	1.8	1.7	1.5	1.5	2.0	2.6
6 to 20 percent	1.8	1.7	2.1	1.9	1.3	1.8	2.0	1.7	2.2
21 to 50 percent	1.9	1.8	2.1	2.4	1.7	2.2	2.1	1.7	2.3
More than 50 percent	1.5	1.8	1.7	2.2	1.9	1.7	1.8	2.0	2.6
Percent of students in school eligible for free or reduced-price lunch									
Less than 35 percent	1.3	1.1	1.5	1.6	1.0	1.4	1.4	1.2	1.9
35 to 49 percent	2.4	2.3	2.6	2.6	2.5	2.8	2.2	2.6	4.0
50 to 74 percent	2.2	2.6	2.0	2.3	2.3	2.7	3.0	1.9	3.9
75 percent or more	1.9	2.1	2.3	2.7	2.6	2.3	2.3	2.9	3.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 13.—Percent of public school teachers indicating how well prepared they felt for various activities in the classroom, by the number of hours spent in professional development in the content area of the activity during the last 12 months: 2000

Activity and hours spent	How well prepared teachers felt			
	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared
New methods of teaching (e.g., cooperative learning)				
0 hours	44	39	13	4
1 to 8 hours	42	44	13	1
More than 8 hours	50	40	9	1
State or district curriculum and performance standards				
0 hours	43	37	16	4
1 to 8 hours	41	41	17	2
More than 8 hours	48	39	11	2
Integration of educational technology into the grade or subject taught				
0 hours	22	30	32	17
1 to 8 hours	22	42	30	6
More than 8 hours	41	40	18	1
Student performance assessment				
0 hours	32	37	25	6
1 to 8 hours	37	42	19	2
More than 8 hours	46	40	14	1
Classroom management, including student discipline				
0 hours	74	22	4	1
1 to 8 hours	66	27	5	1
More than 8 hours	69	25	6	††
Addressing the needs of students from diverse cultural backgrounds				
0 hours	27	37	27	9
1 to 8 hours	37	44	18	1
More than 8 hours	46	39	11	3
Addressing the needs of students with limited English proficiency*				
0 hours	20	28	33	19
1 to 8 hours	30	40	26	4
More than 8 hours	47	38	14	1
Addressing the needs of students with disabilities*				
0 hours	24	38	30	9
1 to 8 hours	32	41	23	3
More than 8 hours	59	30	10	1

†† Less than 0.5 percent.

* Data are based on teachers who reported that they taught students with these characteristics at the school—86 percent taught special education students with Individual Education Plans (IEPs), and 42 percent taught students with limited English proficiency.

NOTE: Teachers reported their participation in professional development during the 12 months preceding the survey. Percentages are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 13a.—Standard errors of the percent of public school teachers indicating how well prepared they felt for various activities in the classroom, by the number of hours spent in professional development in the content area of the activity during the last 12 months: 2000

Activity and hours spent	How well prepared teachers felt			
	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared
New methods of teaching (e.g., cooperative learning)				
0 hours	2.0	1.8	1.4	0.8
1 to 8 hours	1.4	1.4	1.1	0.3
More than 8 hours	1.6	1.6	0.8	0.3
State or district curriculum and performance standards				
0 hours	2.2	2.1	1.7	0.8
1 to 8 hours	1.6	1.4	1.3	0.1
More than 8 hours	1.8	1.7	1.0	0.1
Integration of educational technology into the grade or subject taught				
0 hours	1.7	2.0	2.0	1.5
1 to 8 hours	1.1	1.5	1.5	0.7
More than 8 hours	1.6	1.4	1.5	0.1
Student performance assessment				
0 hours	0.9	1.4	1.3	0.7
1 to 8 hours	1.3	1.2	1.4	0.4
More than 8 hours	1.8	2.2	1.4	0.2
Classroom management, including student discipline				
0 hours	1.1	1.0	0.5	0.3
1 to 8 hours	1.3	1.3	0.8	0.4
More than 8 hours	2.6	2.5	1.4	††
Addressing the needs of students from diverse cultural backgrounds				
0 hours	1.3	1.1	1.2	0.7
1 to 8 hours	1.8	1.5	1.3	0.3
More than 8 hours	3.2	2.7	1.8	1.2
Addressing the needs of students with limited English proficiency				
0 hours	1.5	1.7	1.7	1.7
1 to 8 hours	2.4	2.8	2.4	1.0
More than 8 hours	4.7	4.9	2.9	0.5
Addressing the needs of students with disabilities				
0 hours	1.4	1.3	1.6	0.8
1 to 8 hours	1.5	1.8	1.6	0.5
More than 8 hours	2.9	3.0	1.5	0.5

†† Estimate of standard error is not derived because it is based on a statistic estimated at less than 0.5 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 14.—Percent of public school teachers indicating how well prepared they felt to meet the overall demands of their teaching assignments, by the extent to which their participation in professional development has been linked to various school-based activities: 2000

School-based activity	How well prepared teachers felt for meeting the overall demands of teaching assignments			
	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared
Professional development has been:				
Linked to other program improvements at the school				
To a large/moderate extent	65	32	3	††
To a small extent/not at all	56	38	6	1
Followed by needed follow-up sessions or additional training				
To a large/moderate extent	67	31	2	0
To a small extent/not at all	58	36	5	††
Followed by school activities in which teachers help other teachers put the new ideas to use				
To a large/moderate extent	70	28	2	0
To a small extent/not at all	57	38	5	††
Followed by school administration support in applying what was learned				
To a large/moderate extent	69	29	2	0
To a small extent/not at all	55	39	6	††

†† Less than 0.5 percent.

NOTE: Percentages are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 14a.—Standard errors of the percent of public school teachers indicating how well prepared they felt to meet the overall demands of their teaching assignments, by the extent to which their participation in professional development has been linked to various school-based activities: 2000

School-based activity	How well prepared teachers felt for meeting the overall demands of teaching assignments			
	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared
Professional development has been:				
Linked to other program improvements at the school				
To a large/moderate extent	1.2	1.3	0.4	††
To a small extent/not at all	1.6	1.4	0.7	0.2
Followed by needed follow-up sessions or additional training				
To a large/moderate extent	1.5	1.4	0.5	††
To a small extent/not at all	1.1	1.0	0.5	††
Followed by school activities in which teachers help other teachers put the new ideas to use				
To a large/moderate extent	1.8	1.8	0.5	††
To a small extent/not at all	1.1	0.9	0.6	††
Followed by school administration support in applying what was learned				
To a large/moderate extent	1.3	1.2	0.4	††
To a small extent/not at all	1.3	1.1	0.6	††

†† Standard error is not derived because it based on a statistic estimated at less than 0.5 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 15.—Percent of public school teachers indicating how well prepared they felt for meeting the overall demands of their teaching assignments, by whether they participated in various teaching-related activities during the last 12 months: 2000

Participation in activity	How well prepared teachers felt for meeting the overall demands of teaching assignments			
	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared
Common planning period for team teachers				
Yes	63	33	4	††
No	60	36	4	††
Regularly scheduled collaboration with other teachers, excluding meetings held for administrative purposes				
Yes	63	33	4	††
No	57	38	5	††
Being mentored by another teacher in a formal relationship				
Yes	57	39	4	0
No	62	33	4	††
Mentoring another teacher in a formal relationship				
Yes	71	26	2	††
No	58	37	5	††
Networking with teachers outside the school				
Yes	63	33	3	††
No	57	37	6	1
Individual or collaborative research on a topic of interest professionally				
Yes	63	33	4	††
No	59	36	5	1

†† Less than 0.5 percent.

NOTE: Data are based on public school teachers who participated in the activity during the 12 months preceding the survey. Percentages are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 15a.—Standard errors of the percent of public school teachers indicating how well prepared they felt for meeting the overall demands of their teaching assignments, by whether they participated in various teaching-related activities during the last 12 months: 2000

Participation in activity	How well prepared teachers felt for meeting the overall demands of teaching assignments			
	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared
Common planning period for team teachers				
Yes	1.3	1.2	0.6	††
No	1.2	1.1	0.5	††
Regularly scheduled collaboration with other teachers, excluding meetings held for administrative purposes				
Yes	1.1	1.0	0.5	††
No	1.7	1.6	07	††
Being mentored by another teacher in a formal relationship				
Yes	2.0	1.9	0.9	††
No	1.0	0.9	0.4	††
Mentoring another teacher in a formal relationship				
Yes	1.8	1.7	0.5	††
No	1.0	0.9	0.5	††
Networking with teachers outside the school				
Yes	1.2	1.0	0.5	††
No	1.5	1.4	0.6	0.3
Individual or collaborative research on a topic of interest professionally				
Yes	1.4	1.3	0.5	††
No	1.0	1.0	0.6	0.2

†† Standard error is not derived because it based on a statistic estimated at less than 0.5 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Table 16.—Percent of full-time public school teachers indicating that they participated in professional development activities during the last 12 months that focused on various content areas, by the number of hours spent in the activity: 1998 and 2000

Content area	Participated in the activity		Total hours spent*			
			1998		2000	
	1998	2000	1 to 8	More than 8	1 to 8	More than 8
State or district curriculum and performance standards	81	82	61	39	56	44
Integration of educational technology in the grade or subject taught	78	76	62	38	62	38
New methods of teaching (e.g., cooperative learning)	77	73	61	39	57	43
In-depth study in the subject area of main teaching assignment	73	71	44	56	43	57
Student performance assessment (e.g., methods of testing, applying results to modify instruction)	67	62	71	29	67	33
Addressing the needs of students with disabilities	48	47	81	19	75	25
Classroom management, including student discipline	49	43	78	22	73	27

* Data are based on teachers who participated in the activity during the 12 months preceding the survey.

NOTE: Analyses are based on all full-time public school teachers who taught in a self-contained setting and departmentalized teachers whose main teaching assignment was in a core subject field: English language/language arts, social studies/social sciences, mathematics, science, and foreign languages.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74; and "Teacher Survey on Professional Development and Training," FRSS 65.

Table 16a.—Standard errors of the percent of full-time public school teachers indicating that they participated in professional development activities during the last 12 months that focused on various content areas, by the number of hours spent in the activity: 1998 and 2000

Content area	Participated in the activity		Total hours spent			
			1998		2000	
	1998	2000	1 to 8	More than 8	1 to 8	More than 8
State or district curriculum and performance standards ...	0.8	0.8	1.1	1.1	1.4	1.4
Integration of educational technology in the grade or subject taught	0.8	1.0	1.0	1.0	1.2	1.2
New methods of teaching (e.g., cooperative learning)	0.7	1.0	1.1	1.1	1.3	1.3
In-depth study in the subject area of main teaching assignment.....	0.8	0.9	0.8	0.8	1.4	1.4
Student performance assessment (e.g., methods of testing, applying results to modify instruction)	0.9	1.1	1.2	1.2	1.6	1.6
Addressing the needs of students with disabilities	1.1	1.0	0.8	0.8	1.3	1.3
Classroom management, including student discipline.....	0.9	1.1	1.2	1.2	1.7	1.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74; and "Teacher Survey on Professional Development and Training," FRSS 65.

Table 17.—Percent of full-time public school teachers who participated in various teaching-related activities during the last 12 months, by frequency of participation: 1998 and 2000

Activity	Participated in activity		Frequency of participation*							
			1998				2000			
	1998	2000	At least once a week	2 to 3 times a month	Once a month	A few times a year	At least once a week	2 to 3 times a month	Once a month	A few times a year
Regularly scheduled collaboration with other teachers	81	71	34	22	21	23	32	18	24	26
Networking with teachers outside the school	61	60	10	12	18	60	11	12	18	59
Common planning period for team teachers	62	56	60	14	11	15	63	13	8	15
Individual or collaborative research on a topic of interest professionally	53	52	19	18	16	48	20	16	17	47
Mentoring another teacher in a formal relationship	26	25	42	17	12	29	44	21	11	24
Being mentored by another teacher	19	22	24	17	14	46	34	15	13	38

* Data are based on teachers who participated in the activity during the 12 months preceding the survey.

NOTE: Analyses are based on all full-time public school teachers who taught in a self-contained setting and departmentalized teachers whose main teaching assignment was in a core subject field: English language/language arts, social studies/social sciences, mathematics, science, and foreign languages. Percentages for the frequency of participation are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74; and "Teacher Survey on Professional Development and Training," FRSS 65.

Table 17a.—Standard errors of the percent of full-time public school teachers who participated in various teaching-related activities during the last 12 months, by frequency of participation: 1998 and 2000

Activity	Participated in activity		Frequency of participation							
			1998				2000			
	1998	2000	At least once a week	2 to 3 times a month	Once a month	A few times a year	At least once a week	2 to 3 times a month	Once a month	A few times a year
Regularly scheduled collaboration with other teachers	0.9	1.0	1.1	1.0	0.8	1.1	1.3	1.0	1.1	1.3
Networking with teachers outside the school	0.9	1.0	1.2	0.8	0.8	0.7	0.9	1.0	1.2	1.5
Common planning period for team teachers	0.9	1.1	1.0	0.8	1.0	1.4	1.9	1.3	1.0	1.2
Individual or collaborative research on a topic of interest professionally	0.9	1.1	1.4	1.1	1.1	0.8	1.0	1.0	1.0	1.5
Mentoring another teacher in a formal relationship	0.8	0.9	2.0	1.2	1.7	1.9	2.4	1.7	1.3	2.0
Being mentored by another teacher	0.6	0.8	2.3	1.2	1.6	1.8	2.1	1.6	1.9	2.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74; and "Teacher Survey on Professional Development and Training," FRSS 65.

Table 18.—Percent of full-time public school teachers indicating how well prepared they felt for various activities in the classroom: 1998 and 2000

Activity	How well prepared teachers felt							
	1998				2000			
	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared
Maintain order and discipline in the classroom	71	24	4	1	72	23	4	1
Implement new methods of teaching (e.g., cooperative learning)	41	41	16	2	47	40	11	1
Implement state or district curriculum and performance standards	36	41	20	3	45	40	14	2
Use student performance assessment (e.g., methods of testing, applying results to modify instruction)	28	41	26	4	37	41	19	3
Address the needs of students with disabilities*	21	41	30	7	29	39	26	6
Integrate educational technology in the grade or subject taught	20	37	34	9	27	39	27	7

*Data are based on teachers who reported that they taught students with disabilities at the school—42 percent.

NOTE: Analyses are based on all full-time public school teachers who taught in a self-contained setting and departmentalized teachers whose main teaching assignment was in a core subject field: English language/language arts, social studies/social sciences, mathematics, science, and foreign languages. Percentages are computed across each row but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74; and "Teacher Survey on Professional Development and Training," FRSS 65.

Table 18a.—Standard errors of the percent of full-time public school teachers indicating how well prepared they felt for various activities in the classroom: 1998 and 2000

Activity	How well prepared teachers felt							
	1998				2000			
	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared
Maintain order and discipline in the classroom	0.7	0.7	0.3	0.2	0.9	0.8	0.5	0.2
Implement new methods of teaching (e.g., cooperative learning)	0.8	0.8	0.7	0.3	1.0	1.0	0.8	0.2
Implement state or district curriculum and performance standards	0.9	1.1	1.0	0.3	1.2	1.1	0.9	0.3
Use student performance assessment (e.g., methods of testing, applying results to modify instruction)	1.0	0.9	0.8	0.4	0.8	1.1	0.9	0.4
Address the needs of students with disabilities	0.8	1.1	1.0	0.6	0.8	1.1	0.9	0.4
Integrate educational technology in the grade or subject taught	0.8	1.0	1.0	0.5	0.9	1.0	1.0	0.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74; and "Teacher Survey on Professional Development and Training," FRSS 65.

Appendix A

Methodology and Technical Notes

Methodology and Technical Notes

Sample Selection

The sample for the *Survey on Professional Development and Training in U.S. Public Schools, 1999–2000,* consisted of 5,253 full- and part-time teachers in regular public elementary, middle, and high schools in the 50 states and the District of Columbia. To select the sample of teachers, a sample of 2,209 public schools was first selected from the 1999–2000 Schools and Staffing Survey (SASS) universe file. The 1999–2000 SASS universe file was created from the 1997–98 NCES Common Core of Data (CCD) Public School Universe File. The sample for this study was designed to minimize the overlap with other large NCES studies being conducted concurrently. The sampling frame contained 81,405 regular public schools. Excluded from the sampling frame were special education, vocational, and alternative/other schools, schools in the territories, Department of Defense and Bureau of Indian Affairs schools, and schools with a high grade lower than one or ungraded, or that taught only adult education. The frame contained 49,691 regular elementary schools, 15,204 regular middle schools, and 16,510 regular high/combined schools. A school was defined as an elementary school if the lowest grade was less than or equal to grade 3 and the highest grade was less than or equal to grade 8. A middle school was defined as having a lowest grade greater than or equal to grade 4 and a highest grade less than or equal to grade 9. A school was considered a high school if its lowest grade was greater than or equal to grade 9 and the highest grade was greater than or equal to grade 10. Combined schools were defined as having a lowest grade less than or equal to grade 3 and a highest grade greater than or equal to grade 9 *or* the lowest grade is in grades 4 through 8 and the highest grade is in grades 10 through 12. High schools and combined schools were combined into one category for sampling.

The public school sampling frame was stratified by instructional level (elementary, middle, and high school/combined), locale (city, urban fringe, town, and rural), and school size (less than 300, 300 to 499, 500 to 999, 1,000 to 1,499, and 1,500 or more). Within the primary strata, schools were also sorted by percent minority enrollment in the school (less than 5 percent minority, 5 to 19 percent minority, 20 to 49 percent minority, and 50 percent or more minority) to produce additional implicit stratification. A sample of 2,209 schools was then selected from the sorted frame with conditional probabilities that accounted for the selection of the schools for the other NCES studies. The conditional probabilities were designed to minimize the overlap with the samples selected for the other studies while at the same time ensuring that the overall probabilities of selection were proportionate to size, where the measure of size was the estimated number of full-time-equivalent (FTE) teachers in the school (see Chowdhury, Chu, and Kaufman forthcoming). The sample contained 511 elementary schools, 855 middle schools, and 843 high/combined schools.

Each sampled school was asked to send a list of its teachers, from which a teacher sampling frame was prepared. The teacher sampling frame was designed to represent all public school teachers who taught one or more regularly scheduled classes in any of grades 1 through 12. This included special education teachers, general elementary teachers, vocational/technical education teachers, principals and all other staff members who taught at least one regularly scheduled class per week, itinerant, co-op, traveling, and satellite teachers who taught at the sampled school for more than 50 percent of their total teaching hours, current long-term substitute teachers, and other teachers who taught students in grades 1 through 12. Schools were instructed to omit the following from the teacher list: teachers' aides, student teachers, day care aides, unpaid volunteers, teachers who taught only kindergarten or preschool students,

short-term substitutes, itinerant teachers who taught more than half of their teaching hours at another school, and principals and all other staff members who did not teach a regularly scheduled class at the school. Schools were then instructed to indicate the primary subject taught for each teacher on the list, using the following categories: (1) self-contained, for teachers who teach all or most academic subjects in a self-contained classroom setting (including most elementary school teachers), (2) math teachers, (3) science teachers, (4) English teachers, (5) social studies teachers, and (6) other, for teachers of all other subjects. Schools were then asked to indicate the total years of teaching experience for each teacher on the list, using the categories of 3 or fewer years, or 4 or more years teaching experience, counting the current academic year as 1 full year.

Within selected schools, eligible teachers were selected for the survey at rates that depended on instructional level, years of teaching experience (3 years or less versus 4 years or more), and subject taught. On average, 2.8 teachers (and no more than 4 teachers) were selected per school. A total of 5,253 teachers were selected. The sample contained 1,222 elementary school teachers, 2,033 middle school teachers, and 1,998 high school/combined teachers.

Respondent and Response Rates

A letter, instruction sheet, and form for preparing the list of teachers was sent to the principal of each sampled school in early October 1999. The letter introduced the study, requested the principal's cooperation to sample teachers, and asked the principal to prepare the list of teachers. Telephone follow up was conducted from November 1999 through March 2000 with principals who did not respond to the initial request for teacher lists. Of the 2,209 schools in the sample, 9 were found to be out of the scope of the survey (no longer in existence), for a total of 2,200 eligible schools. Teacher lists were provided by 1,890 schools, or 86 percent of the eligible schools. The weighted response rate[1] to the teacher list collection was 88 percent.

Questionnaires were mailed to the teachers in two phases, so that data collection on the teacher questionnaire would not be delayed while the list collection phase was being completed. The first phase of questionnaires was mailed in mid-March 2000, and the second in late April 2000. Telephone follow-up was conducted from April through September 2000 with teachers who did not respond to the initial questionnaire mailing. Teachers were called at their schools until late June.

Beginning in late June, when schools were closed for the summer and teachers could no longer be reached in this way, teachers were called at home if a telephone number for them could be located. To facilitate telephone data collection with teachers at their home numbers, a shorter version of the questionnaire was developed that retained key items. This shorter version of the questionnaire was used until data collection ended in early September. All data presented in this report are based only on key items from this shorter questionnaire (see appendix B, survey instrument).

Of the 5,253 teachers selected for the sample, 377 were found to be out of the scope of the survey. This left a total of 4,876 eligible teachers in the sample. Completed questionnaires were received from 4,128 teachers, or 85 percent of the eligible teachers (table A-1). Of these 4,128 teachers, 3,347 completed the full questionnaire, and 781 completed the shorter version of the questionnaire. The weighted teacher response rate was 84 percent. The unweighted overall response rate was 73 percent (85.9 percent for the list collection multiplied by 84.7 percent for the teacher questionnaire). The weighted overall response rate was 75 percent (88.3 percent for the list collection multiplied by 84.5

[1] All weighted response rates were calculated using the base weight.

percent for the teacher questionnaire). Unweighted item nonresponse rates ranged from 0 percent to 6 percent, with most under 1 percent and one item with a nonresponse of 6 percent. Because the item nonresponse was so low, imputation for item nonresponse was not implemented.

Table A-1.—Number and percent of responding public school teachers in the study sample and estimated number and percent of public school teachers the sample represents, by selected teacher and school characteristics: 2000

Teacher and school characteristic	Respondent sample		National estimate	
	Number	Percent	Number	Percent
All public school teachers	4,128	100	2,407,580	100
Teaching experience				
3 or fewer years	732	18	415,104	17
4 to 9 years	971	24	538,283	22
10 or more years	2,425	59	1,454,192	60
School instructional level				
Elementary school	943	23	1,111,001	46
Middle school	1,592	39	538,757	22
High school	1,313	32	625,729	26
Combined school	280	7	132,093	6
School enrollment size				
Less than 500	1,152	28	772,489	32
500 to 999	1,744	42	1,037,996	43
1,000 or more	1,232	30	597,095	25
School locale				
Central city	1,152	28	733,163	31
Urban fringe/large town	1,671	41	994,303	41
Rural/small town	1,305	32	680,113	28
Region				
Northeast	716	17	458,360	19
Midwest	1,101	27	617,069	26
South	1,481	36	841,824	35
West	830	20	490,329	20
Percent minority enrollment in school				
5 percent or less	1144	28	651,281	27
6 to 20 percent	1008	24	568,729	24
21 to 50 percent	971	24	556,847	23
More than 50 percent	1,005	24	630,724	26
Percent of students in school eligible for free or reduced-price school lunch				
Less than 35 percent	2,312	57	1,280,357	54
35 to 49 percent	617	15	332,182	14
50 to 74 percent	597	15	383,933	16
75 percent or more	555	14	382,638	16

NOTE: Details may not sum to totals because of rounding or missing data. There were very small amounts of missing data for the percent of students in school eligible for free or reduced-price lunch (47 cases) and percent minority enrollment in the school (48 cases). Percents are computed within each classification variable, but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74.

Sampling and Nonsampling Errors

The responses were weighted to produce national estimates (see table A-1). The weights were designed to adjust for the variable probabilities of selection and differential nonresponse. The findings in this report are estimates based on the sample selected and, consequently, are subject to sampling variability.

The survey estimates are also subject to nonsampling errors that can arise because of nonobservation (nonresponse or noncoverage) errors, errors of reporting, and errors made in data collection. These errors can sometimes bias the data. Nonsampling errors may include such problems as misrecording of responses; incorrect editing, coding, and data entry; differences related to the particular time the survey was conducted; or errors in data preparation. While general sampling theory can be used in part to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure and, for measurement purposes, usually require that an experiment be conducted as part of the data collection procedures or that data external to the study be used.

To minimize the potential for nonsampling errors, the questionnaire was pretested with respondents like those who completed the survey. During the design of the survey and the survey pretest, an effort was made to check for consistency of interpretation of questions and to eliminate ambiguous items. The questionnaire and instructions were extensively reviewed by the National Center for Education Statistics and the Office of the Secretary, U.S. Department of Education. Manual and machine editing of the questionnaire responses were conducted to check the data for accuracy and consistency. Cases with missing or inconsistent items were recontacted by telephone. Data were keyed with 100 percent verification.

An examination of the survey data on out-of-field teaching led to concerns over the stability of the estimates. In particular, when these data were compared to estimates from a larger ongoing survey, the magnitude of the differences was not entirely explicable and thus was a cause for concern. NCES anticipates releasing a report with out-of-field estimates from the larger survey in September 2001.

Variances

The standard error is a measure of the variability of estimates due to sampling. It indicates the variability of a sample estimate that would be obtained from all possible samples of a given design and size. Standard errors are used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is a 95 percent confidence interval. For example, the estimated percentage of teachers who felt very well prepared for their overall teaching assignments is 61.1 percent, and the estimated standard error is 0.9 percent. The 95 percent confidence interval for the statistic extends from [61.1 – (0.9 times 1.96)] to [61.1 + (0.9 times 1.96)], or from 59.3 to 62.9 percent.

Estimates of standard errors were computed using a technique known as jackknife replication. As with any replication method, jackknife replication involves constructing a number of subsamples (replicates) from the full sample and computing the statistic of interest for each replicate. The mean square error of the replicate estimates around the full sample estimate provides an estimate of the

variances of the statistics. To construct the replications, 50 stratified subsamples of the full sample were created and then dropped one at a time to define 50 jackknife replicates. A computer program (WesVar Complex Samples) was used to calculate the estimates of standard errors. WesVar is a stand-alone Windows application that computes sampling errors from complex samples for a wide variety of statistics (totals, percents, ratios, log-odds ratios, general functions of estimates in tables, linear regression parameters, and logistic regression parameters).

The test statistics used in the analysis were calculated using the jackknife variances and thus appropriately reflected the complex nature of the sample design. In particular, an adjusted chi-square test using Satterthwaite's approximation to the design effect was used in the analysis of the two-way tables. Finally, Bonferroni adjustments were made to control for multiple comparisons where appropriate. For example, for an "experiment-wise" comparison involving g pairwise comparisons, each difference was tested at the 0.05/g significance level to control for the fact that g differences were simultaneously tested.

Definitions of Analysis Variables

School instructional level—Schools were classified according to their grade span in the Common Core of Data (CCD).

Elementary school—lowest grade less than or equal to grade 3 and highest grade less than or equal to grade 8.

Middle school—lowest grade greater than or equal to grade 4 and highest grade less than or equal to grade 9.

High school—lowest grade greater than or equal to grade 9 and highest grade greater than or equal to grade 10.

Combined school—lowest grade less than or equal to grade 3 and highest grade greater than or equal to grade 9 *or* the lowest grade is in grades 4 through 8 and the highest grade is in grades 10 through 12.

School enrollment size—total number of student enrolled as defined by the CCD.

Less than 500 students

500 to 999 students

1,000 or more students

Locale—as defined in the CCD.

Central city—a large or mid-size central city of a Metropolitan Statistical Area (MSA).

Urban fringe/large town—urban fringe is a place within an MSA of a central city, but not primarily its central city; large town is an incorporated place not within an MSA, with a population greater than or equal to 25,000.

Small town/rural—small town is an incorporated place not within an MSA, with a population less than 25,000 and greater than or equal to 2,500; rural is a place with a population less than 2,500 and/or a population density of less than 1,000 per square mile, and defined as rural by the U.S. Bureau of the Census.

Percent minority enrollment in the school—The percent of students enrolled in the school whose race or ethnicity is classified as one of the following: American Indian or Alaskan Native, Asian or Pacific Islander, black, or Hispanic, based on data in the 1997–98 CCD file.

5 percent or less
6 to 20 percent
21 to 50 percent
More than 50 percent

Percent of students at the school eligible for free or reduced-price lunch—This was based on information collected from the school during the teacher list collection phase; if it was missing from the list collection, it was obtained from the CCD file, if possible. Data on this variable were missing for 1.3 percent of the teachers sampled. This item served as the measurement of the concentration of poverty at the school.

Less than 35 percent
35 to 49 percent
50 to 74 percent
75 percent or more

Teaching experience—total years of teaching experience, based on responses to question 11 on the survey questionnaire.

3 or fewer years
4 to 9 years
10 or more years

It is important to note that many of the school characteristics used for independent analyses may also be related to each other. For example, enrollment size and instructional level of schools are related, with middle and high schools typically being larger than elementary schools. Similarly, poverty concentration and minority enrollment are related, with schools with a high minority enrollment also more likely to have a high concentration of poverty. Other relationships between analysis variables may exist. Because of the relatively small sample size used in this study, it is difficult to separate the independent effects of these variables. Their existence, however, should be considered in the interpretation of the data presented in this report.

Comparisons to the 1998 Survey on Professional Development and Training

Data from this survey (referred to here as the 2000 survey) were compared to data from the 1998 Teacher Survey on Professional Development and Training (referred to here as the 1998 survey). As a first step in these comparisons, a subset of teachers was selected from the 2000 survey that was similar to the teachers sampled for the 1998 survey. Regular full-time teachers who taught in grades 1 through 12 in regular public schools in the 50 states and the District of Columbia defined the overall eligible group of teachers. Within that group, teachers from the 2000 survey were selected for inclusion in the subset for these analyses if their main teaching assignment was in English/language arts, social studies/social sciences, foreign language, mathematics, or science, or if they taught a self-contained classroom. Specifically, regular full-time teachers whose main teaching assignment was a core academic subject that was taught in a departmentalized setting were defined on the 2000 questionnaire (see appendix B) as those with a main assignment at the school as a regular full-time teacher (question 1 = 1), *and* with classes organized as either departmentalized instruction or team teaching in a cluster setting (question 2 =

1 or 2), *and* with a main teaching assignment field in one of the core subjects (question 3a = codes 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51). Regular full-time teachers who taught in a self-contained setting were defined on the 2000 questionnaire as those with a main assignment at the school as a regular full-time teacher (question 1 = 1), *and* with classes organized as either team teaching in a regular setting or a self-contained class (question 2 = 3 or 4). Of the 4,128 teachers who responded to the 2000 survey, 3,251 were retained for the comparisons to the 1998 survey.

Background Information

The survey was performed under contract with Westat. Westat's Project Director was Elizabeth Farris, and the Survey Manager was Basmat Parsad. Bernie Greene was the NCES Project Officer. The data were requested by Terry Dozier, Office of the Secretary, U.S. Department of Education.

This report was reviewed by the following individuals:

Outside NCES

- Susan Choy, MPR Associates
- Arthur Cole, Office of Elementary and Secondary Education, U.S. Department of Education
- Stephanie Cronen, American Institutes for Research
- Lawrence Lanahan, American Institutes for Research
- Doug Levin, American Institutes for Research

Inside NCES

- Shelley Burns, Early Childhood, International, and Crosscutting Studies Division
- Kerry Gruber, Elementary/Secondary and Libraries Studies Division
- Marilyn McMillen, Chief Statistician
- Valena Plisko, Associate Commissioner, Early Childhood, International, and Crosscutting Studies Division
- John Ralph, Early Childhood, International, and Crosscutting Studies Division
- Linda Zimbler, Postsecondary Studies Division
- Jeff Owings, Elementary/Secondary and Libraries Studies Division

For more information about the survey, contact Bernie Greene, Early Childhood, International, and Crosscutting Studies Division, National Center for Education Statistics, Office of Educational Research and Improvement, U.S. Department of Education, 1990 K Street, NW, Washington, DC 20006, e-mail: Bernard.Greene@ed.gov, telephone 202–502–7348.

Appendix B

Survey Instrument

U.S. DEPARTMENT OF EDUCATION
NATIONAL CENTER FOR EDUCATION STATISTICS
WASHINGTON, D.C. 20208-5651

FORM APPROVED
O.M.B. NO.: 1850-0757
EXPIRATION DATE: 12/31/2000

SURVEY ON PROFESSIONAL DEVELOPMENT AND TRAINING IN U.S. PUBLIC SCHOOLS, 1999-2000

This survey is authorized by law (P.L. 103-382). While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate, and timely.

LABEL

PLEASE FILL IN THE FOLLOWING INFORMATION:

Name of person completing form:_____ Telephone:_____

Title/position: _____ E-mail:_____

Name of school : _____

Best days and times to reach you (in case of questions):_____

THANK YOU. PLEASE KEEP A COPY OF THIS SURVEY FOR YOUR FILES.

PLEASE RETURN COMPLETED FORM TO:	IF YOU HAVE ANY QUESTIONS, CONTACT:
WESTAT Attention: Parsad, 716617 1650 Research Boulevard Rockville, Maryland 20850	Basmat Parsad at Westat 800-937-8281, ext. 8222 or 301-251-8222 Fax: 1-800-254-0984 E-mail: Parsadb1@westat.com

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information is 1850-0757. The time required to complete this information collection is estimated to average 15 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collected. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: U.S. Department of Education, Washington, D.C. 20202-4651. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: National Center for Education Statistics, 1990 K Street, N.W., Washington, D.C. 20208.

Form No. 74, 2/2000

1. How do you classify your main assignment at THIS school (i.e., the activity at which you spend most of your time) during this school year? *(Circle one only.)*

Regular full-time teacher 1
Regular part-time teacher 2
Itinerant teacher, but you work more than half of your teaching hours at THIS school (i.e., your assignment requires you to provide instruction at more than one school, but you work the most hours at this school) 3
Long-term substitute (i.e., your assignment requires that you fill the role of a regular teacher on a long-term basis, but you are still considered a substitute) 4
Other staff who teach regularly scheduled classes (e.g., administrator, library media specialist or librarian, support staff, other professional staff including counselor and social worker) 5
Other *(specify)*_____ 6

2. Which best describes the way YOUR classes at this school are organized? (*Check one only.*)

Departmentalized instruction (You teach subject matter courses (e.g., chemistry, history) to several classes of different students all or most of the day.) 1
Team teaching in a cluster setting (You collaborate with one or more teachers in teaching multiple subjects to more than one class of students.) 2
} ***Continue with question 3.***

Team teaching in a regular setting (You collaborate with one or more teachers in teaching multiple subjects to the same class of students.) 3
Self-contained class (You teach multiple subjects to the same class of students all or most of the day.) 4
"Pull-out" class (You provide instruction (e.g., special education, reading) to certain students who are released from their regular classes.) 5
} ***Skip to question 4.***

3. Considering your most recent FULL WEEK of teaching at THIS school:
   - Record in **column A**, your main, secondary, and other assignment fields.
- Record in **column B**, the total number of classes taught. To calculate the number of classes taught, do NOT include homeroom periods, study halls, or classes taught at any other school. If you teach 2 or more classes of the same subject (e.g., Chemistry 1) to DIFFERENT GROUPS OF STUDENTS at this school, count them as separate classes (e.g., if you teach chemistry to 2 classes of students and physics to 2 classes of students, you would report 4 classes of different groups of students).
- Record in **column C**, the total number of students enrolled in the classes or sections taught. Count each student only once.

Teaching assignment field		A. Teaching assignment field(s)	B. Total number of classes taught during your most recent full week of teaching (*see instruction on how to count classes*)	C. Total number of students enrolled in the classes or sections taught during your most recent full week of teaching (*Count each student only once*)
a.	MAIN teaching assignment field (i.e., the field in which you teach the most classes)?	_____	_____	_____
b.	SECONDARY teaching assignment field (i.e., the field in which you teach the second most classes)? ..	_____	_____	_____
c.	OTHER teaching assignment field?	_____	_____	_____

4. Considering all the students you teach at THIS school:

	Yes	No
a. Do you teach students with disabilities or special education students, that is, students who have an Individual Education Plan (IEP)?	1	2
b. Do you teach students with limited English proficiency (i.e., students whose native or dominant language is other than English, and who have sufficient difficulty speaking, reading, writing, and understanding the English language as to deny them the opportunity to learn successfully in an English-speaking-only classroom)?	1	2

5. Indicate in **column A** whether you hold each of the following degree or certificate. For each degree or certificate held, record in **column B** your major and minor fields of study. If you completed more than one degree or certificate at a level or had a double major or minor, please provide information for all fields of study at that level.

Degree or certificate	A. Yes	A. No	B. If yes, record your: Major field(s) of study *(Record all that apply)*	B. If yes, record your: Minor field(s) of study *(Record all that apply)*
Bachelor's degree(s)?	1	2		
Postbaccalaureate certificate(s)?	1	2		
Master's degree(s)?	1	2		
Post-master's certificate(s)?	1	2		
Doctorate degree(s)?	1	2		
Other degree(s)? (*specify*) _____	1	2		

6. Considering all of the professional development activities in which you participated during the last 12 months (excluding preservice training), in **column A,** how many total hours, if any, have you spent in activities in which the following content areas were a major focus? For any content area that was a major focus of professional development activities, indicate in **column B**, the extent to which you believe it has improved your classroom teaching.

Content area	A. Total hours spent 0	1-8	9-32	33-80	More than 80	B. Improved my teaching A lot	Moder-ately	Some-what	Not at all
	(Circle one per line.)								
a. Indepth study in the subject area of your main teaching assignment	1	2	3	4	5	1	2	3	4
b. New methods of teaching (e.g., cooperative learning)	1	2	3	4	5	1	2	3	4
c. State or district curriculum and performance standards	1	2	3	4	5	1	2	3	4
d. Integration of educational technology in the grade or subject you teach	1	2	3	4	5	1	2	3	4
e. Student performance assessment (e.g., methods of testing, applying results to modify instruction)	1	2	3	4	5	1	2	3	4
f. Classroom management, including student discipline	1	2	3	4	5	1	2	3	4
g. Addressing the needs of students from diverse cultural backgrounds	1	2	3	4	5	1	2	3	4
h. Addressing the needs of students with limited English proficiency	1	2	3	4	5	1	2	3	4
i. Addressing the needs of students with disabilities	1	2	3	4	5	1	2	3	4
j. Encouraging parent and community involvement	1	2	3	4	5	1	2	3	4
k. Other *(Please describe.)* _____	1	2	3	4	5	1	2	3	4

7a. During the last 12 months, did you teach mathematics at any grade level at THIS school?

Yes ..... 1 ***(Continue with question 7b.)***
No ..... 2 ***(Go to question 8.)***

7b. During the last 12 months, did you participate in any professional development activities (excluding preservice training) related to your mathematics teaching? (*Include any relevant professional development activity reported in question 9.)*

Yes ..... 1 ***(Continue with question 7c.)***
No ..... 2 ***(Go to question 8.)***

7c. Did the mathematics professional development activities in which you participated in during the last 12 months cover any of the following topics? *(Circle one per line.)*

	Yes	No
a. Instructional methods in mathematics	1	2
b. Work with state and/or district mathematics content standards	1	2
c. Study of mathematics content/topics	1	2
d. Reviewing student work or assessment results in mathematics	1	2

8. For the professional development activities in which you participated during the last 12 months, to what extent does each of the following statements describe your experience? *(Circle one per line.)*

Professional development in which I participated has:	**To a great extent**	**To a moderate extent**	**To a small extent**	**Not at all**
a. Been linked to other program improvement activities at my school	1	2	3	4
b. Been followed by needed follow-up sessions or additional training	1	2	3	4
c. Been followed by school activities in which I help other teachers put the new ideas to use	1	2	3	4
d. Been followed by school administration support in applying what I have learned	1	2	3	4

9. During the last 12 months, how frequently have you participated in the following activities related to teaching? For any activity in which you participated, indicate the extent you believe the activity has improved your classroom teaching. Include any professional development activities you participated in, but exclude any activities you participated in during preservice training.

	Frequency of activities					**Improved my teaching**			
Activity	**Never**	**At least once a week**	**2 to 3 times a month**	**Once a month**	**A few times a year**	**A lot**	**Moderately**	**Somewhat**	**Not at all**
	(Circle one per line.)								
a. Common planning period for team teachers	1	2	3	4	5	1	2	3	4
b. Being mentored by another teacher in a formal relationship	1	2	3	4	5	1	2	3	4
c. Mentoring another teacher in a formal relationship	1	2	3	4	5	1	2	3	4
d. Networking with teachers outside your school	1	2	3	4	5	1	2	3	4
e. Regularly scheduled collaboration with other teachers, excluding meetings held for administrative purposes	1	2	3	4	5	1	2	3	4
f. Individual or collaborative research on a topic of interest to you professionally	1	2	3	4	5	1	2	3	4
g. Other *(please describe)* _____	1	2	3	4	5	1	2	3	4

10. How well prepared do you feel to do the following activities in the classroom? (*Circle one per line.*)

	Very well prepared	Moderately well prepared	Somewhat well prepared	Not at all prepared
a. Implement new methods of teaching (e.g., cooperative learning)	1	2	3	4
b. Implement state or district curriculum and performance standards	1	2	3	4
c. Integrate educational technology in the grade or subject you teach	1	2	3	4
d. Use student performance assessment (e.g., methods of testing, applying results to modify instruction)	1	2	3	4
e. Maintain order and discipline in the classroom	1	2	3	4
f. Address the needs of students from diverse cultural backgrounds	1	2	3	4
g. Address the needs of students with limited English proficiency	1	2	3	4
h. Address the needs of students with disabilities	1	2	3	4
i. Meet the overall demands of my teaching assignments	1	2	3	4

11. Including this school year, how many years have you been employed as a teacher?_____ At THIS school? _____ (*Include years spent teaching both full and part time, in both public and private schools.*)

12. What grades do you currently teach at this school? (*Circle all that apply.*)

PK K 1 2 3 4 5 6 7 8 9 10 11 12

THANK YOU. PLEASE KEEP A COPY FOR YOUR RECORDS.

United States
Department of Education
ED Pubs
8242-B Sandy Court
Jessup, MD 20794-1398

Official Business
Penalty for Private Use $300

Postage and Fees Paid
U.S. Department of
Education
Permit No. G-17

MEDIA MAIL

EP: 82924
PHILIP PIELE
DIRECTOR, ERIC CLEARINGHOUSE ON
5207 UNIVERSITY OF OREGON
EDUCATIONAL MANAGEMENT
1787 AGATE ST
EUGENE OR 97403-1923

BEST COPY AVAILABLE